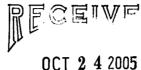




October 20, 2005

Mr. Mike O'Brien
U.S. Environmental Protection Agency
RGP-NOC Processing
Municipal Assistance (CMU)
1 Congress Street
Suite 1100 (OEP-CPE)
Boston, MA 02114-2033
Sent via facsimile (617) 918-0505



2

NPDES PERMIT UN

Re:

Notice of Intent of Remediation General Permit (RGP)
Braintree-Weymouth Replacement Pump Station Project

MWRA Contract #5375

27 Kilby Street Quincy, MA 02169

NPDES Exclusion MA#051-050

Dear Mr. O'Brien:

BATG Environmental, Inc. is pleased to present Notice of Intent of Remediation General Permit (RGP) for NPDES Exclusion Permit MA#051-050. This permit is being requested to support construction-dewatering activities to be conducted on the site for treatment and discharge to Rock Island Cove, a tributary to Weymouth Fore River. The Project is being conducted for the Massachusetts Water Resources Authority (MWRA) for the replacement of the existing Sewerage Pumping Station.

#### **Project Contacts**

BATG is the Environmental Consultant/Subcontractor to JF White Contracting Company, the general contractor. The MWRA is considered the owner of the project. Below is the contact information for each of the entities listed above. All correspondence related to this submittal should be addressed to BATG.

BATG Environmental 448 Broadway

Taunton, MA 0278 Phone: 508-824-74112

Fax: 508-880-7565 Contact: Phil Peterson JF White Contracting Company

10 Burr Street

Framingham, MA 01701 Phone 508-879-4700 Fax: (617) 558-0460

Contact: Jack Dugan

**MWRA** 

100 First Ave., Charlestown

Navy Yard

Boston, MA 02129

Phone: (617) 788-2759

Fax: (617) 788-1295 Contact: Mark Radville

#### **Existing Groundwater Data**

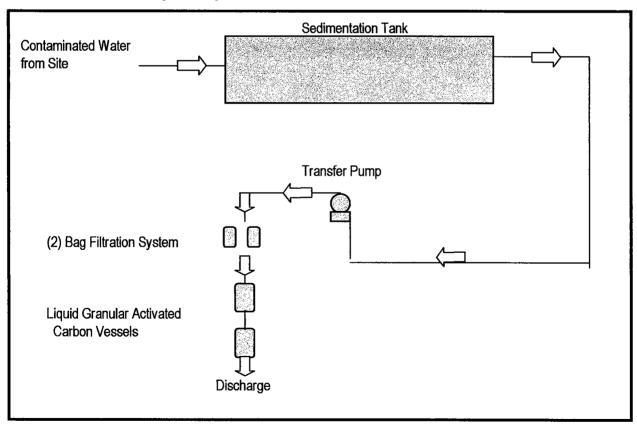
The site history indicates that there have been one or more historic releases of fuel oil in the vicinity of a No. 2-fuel aboveground storage tank (AST) at the Braintree-Weymouth Pump Station. Below is a list of the contaminants of concern that has been created based on available data from untreated influent and soil analysis.

- Total Petroleum Hydrocarbons
- PAHs
- Total Suspended Solids

#### **Groundwater Treatment System**

The construction dewatering and treatment system has been designed for a continuous throughput of approximately 75 gallons per minute. The system is designed to treat water contaminated with organic compounds, total suspended solids, and petroleum hydrocarbons. The system consists of two pumps, a sedimentation tank, canister filtration units with bag filters, and two 1,000-pound liquid phase granular activated carbon filters. The first pump will transfer water from the excavation to the sedimentation tank. The second pump will transfer water from the sedimentation tank to the filters and effluent. Below is a schematic of the treatment system process. The effluent pipe from the groundwater treatment system will be suspended in a storm drain that discharges to Rock Island Cove, tributary to the Fore River not to cause scouring or erosion to the sediment or embankments

#### **Groundwater Treatment System Layout**



#### Owner's Engineer Request to remove Liquid Granular Activated Carbon Vessels from Treatment Process

On October 13, 2005, BATG's client JF Contracting Co., on behalf of the MWRA's Engineer Metcalf and Eddy (M&E), forwarded a letter stating M&E's opinion that the Liquid Granular Activated Carbon Vessels are not required. On same day BATG forwarded a memorandum stating the requirement to utilize the Liquid Granular Activated Carbon Vessels. In response to BATG's October 13, 2005 memorandum, JF White forwarded a letter to BATG on October 17, 2005 stating, "a request should be made to the US Environmental Protection Agency for elimination of the carbon unit." Attached you will find a copy of the three separate correspondences made concerning JF White's request. Please provide guidance on this issue at your earliest convenience.

Should you have any questions or require additional information please do not hesitate to call me at (508) 824-7412. Please forward all correspondence related to this request to BATG Environmental via fax number 508-880-7565 and the above listed contacts as necessary.

Sincerely,

BATG Environmental, Inc.

Philip Peterson Project Manager

#### Attachment

- (1) Correspondence(s) Owner's Engineer Request to remove Liquid Granular Activated Carbon Vessels from Treatment Process
- (2) Notice of Intent of Remediation General Permit (RGP)

CC:

Jack Dugan, JFW BATG Project File

#### Attachment -1

Correspondence(s) - Owner's Engineer Request to remove Liquid Granular Activated Carbon Vessels from Treatment Process



#### J. F. WHITE CONTRACTING COMPANY

10 Burr Street, P. O. Box 9020 Framingham MA 01701-4617 TELEPHONE (508) 879-4700 Fax (617) 558-0460

October 13, 2005 JFW Letter No. BATG1-00012

Phil Peterson BATG Environmental 448 Broadway Taunton, MA 02780

Re:

**B-W Replacement Pump Station** 

**Dewatering Requirements** 

Dear Mr. Peterson:

During the Project Progress meeting on October 12, 2005, between J.F. White, Metcalf and Eddy, and the Authority, Metcalf and Eddy questioned why it was necessary to pass the dewatering effluent through the carbon stripping unit. Their opinion is that because the influent is free from any contamination, the stripper unit is not required. Per recent discussions between yourself and J.F. White's superintendent, you stated that the unit is required per Environmental Protection Agency and Massachusetts's Department of Environmental Protection Regulations. As neither J.F. White nor Metcalf and Eddy are familiar with these requirements, please forward the requirements and detailed reasoning for the continued use of the stripper to our office by Friday October 14, 2005.

If you have any questions regarding this matter, or if you need further information, please contact me at (617) 770-9302. Thank you for your cooperation with this matter.

Very truly yours,

J.F. White Contracting Company

Amy B. Bourdeau Project Engineer

TG

cc: 0435/TP

### BATG Environmental, Inc. 448 Broadway Taunton, MA 02780

Phone: (508)-824-7412 Fax: (508)-880-7565

#### Memorandum

Date:

October 13, 2005

To:

Amy Bourdeau, Project Engineer JF White Contracting Company

From:

Philip M. Peterson, Project Manager

Project:

Braintree-Weymouth Replacement Pump Station

MWRA Contract #5375

Subject:

Response to JFW Letter No. BATG1-00012

This memorandum was prepared in response to your letter received October 13, 2005 referenced as JFW Letter No. BATG1-00012.

Groundwater samples collected from the influent of the treatment system, water samples collected from catch basins, soil samples collected during the investigation of additional contamination at the groundwater interface and confirmatory samples collected at and/or below the groundwater interface indicate the presence of petroleum contamination onsite. Also, on multiple occasions a petroleum sheen was observed on the groundwater and surface water within the excavation and settling tanks. Based on this information, contamination still exists onsite requiring the use of the activated carbon portion of the treatment system to meet the discharge limits of the NPDES Exclusion Permit.

Please forward this memorandum to the Project for record. Should you have any questions or would like to schedule a meeting to further discuss this issue, please feel free to contact me at the above referenced telephone number.



#### J. F. WHITE CONTRACTING COMPANY

10 BURR STREET, P. O. BOX 9020 FRAMINGHAM MA 01701-4617 TELEPHONE (508) 879-4700 FAX (617) 558-0460

October 17, 2005 JFW Letter No. BATG1-00013

Phil Peterson BATG Environmental 448 Broadway Taunton, MA 02780

Re:

**B-W Replacement Pump Station** 

Dewatering Requirements

Dear Mr. Peterson:

We refer to your memorandum dated October 13, 2005 regarding the above captioned subject matter and do not entirely concur with your position on this matter. As you are aware, and to the best of our knowledge, the contaminated materials have been excavated, transported and disposed off site. These previous known areas of contamination have been verified clean by confirmatory sampling and testing. Additionally, subsequent influent and effluent tests of the charcoal treatment system have identified the dewatering activities to be clean, except for one sample during the initial 6-day test period, which appears as an anomaly.

Based on the conditions at the construction site, it appears a majority of the water is a result of an 8" diameter clay pipe (under drain), located below the existing 30" concrete conduit. Other sources of water appear to be tidal fluctuation and are typical ground water conditions.

Therefore, based on the site conditions and the water quality test results, it is our position that a request should be made to the U.S. Environmental Protection Agency for elimination of the carbon unit.

If you do not agree with position please provide a detailed response as to why the treatment system is still required. Please contact this office (617-770-9302) should you have any questions regarding this matter or want to discuss same. We await your timely response.

Very truly yours,

J.F. White Contracting Company

Amy B. Bourdeau Project Engineer

TG

cc: 0435/TP

<u>Attachment -2</u>
Notice of Intent of Remediation General Permit (RGP)

### B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General site information. Please provide the following information about the site:

a) Name of <b>facility/site</b> : Braintree-Weymouth Replacement Pump Station		Facility/site address: 27 Kilby Street Quincy,	Massachusetts 02169-283	1		
Location of <b>facility/site</b> : longitude: 42 15 latitude: 70 58	Facility SIC code(s): N/A	Street: 27 Kilby Street				
b) Name of facility/site owner: Massachusetts Wa	ater Resources Authority	Town: Quincy				
Email address of owner: mark.radville@mwra.state.ma.us		State:	Zip: 02129	County: Suffolk		
Telephone no.of facility/site owner: (617) 788-275	59					
Fax no. of facility/site <b>owner</b> : (617) 788-129  Address of <b>owner</b> (if different from site):	25	Owner is (check one): 3. Private 4. oth	1. Federal 2. State/Tri er, if so, describe:	en e		
Street: 100 First Ave. (Charlestown Navy Yard)				rugur ad Migra da M		
Town: Boston	State: MA	Zip: 02129	County: Suffolk			
c) Legal name of <b>operator</b> :  BATG Environmental, Inc.	Operator tel	ephone no: (508) 824-741	2			
BATO Environmental, me.	Operator far	c no.: (508) 880-7565	Operator email: ppeterson@batgen	vironmental.com		
Operator contact name and title: Philip M. Peterso	n, Project Manager					

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent or seasonal?  Is discharge ongoing Yes No?	
c) Expected dates of discharge (mm/dd/yy): start_08/02/05	end08/02/07	
d) Please attach a line drawing or flow schematic showing water 1. sources of intake water, 2. contributing flow from the operation	flow through the facility including:  1, 3. treatment units, and 4. discharge points and receiving waters(s).	

36 N.

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential

discharge. Attach additional sheets as needed.

PARAMETER	Believe	Believe	# of	Type of	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg. daily value	
	Absent	Present	Samples (1 min- imum)	Sample (e.g., grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		~	3	Grab	sm254	10	420			
2. Total Residual Chlorine	V									
3. Total Petroleum Hydrocarbons		~	5	Grab	8100	0.5	25000		1	
4. Cyanide	~									
5. Benzene		~	5	Grab	8260	<1.0	<10			
6. Toluene			5	Grab	8260	,<1.0	<10			
7. Ethylbenzene		~	5	Grab	8260	<1.0	<10			
8. (m,p,o) Xylenes		~	5	Grab	8260	<1.0	<20		•	
9. Total BTEX <sup>4</sup>		V	5	Grab	8260	<6.0	<60			

<sup>&</sup>lt;sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg. daily value	
	Absent	ricsent	(1 min- imum)	grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)										
11. Methyl-tert-Butyl Ether (MtBE)		~	5	grab	8260	<20	<20			
12. tert-Butyl Alcohol (TBA)	~									
13. tert-Amyl Methyl Ether (TAME)	~									
14. Naphthalene	~		5	Grab	8260	<10	<10		7 - NA 64 4 - Z	4 W
15. Carbon Tetra- chloride	~									1
16. 1,4 Dichlorobenzene	~							<u> </u>		
17. 1,2 Dichlorobenzene	V									
18. 1,3 Dichlorobenzene	V									
19. 1,1 Dichloroethane	V									
20. 1,2 Dichloroethane	V									
21. 1,1 Dichloroethylene	V									
22. cis-1,2 Dichloro- ethylene	V									ن .
23. Dichloromethane (Methylene Chloride)	~									:
24. Tetrachloroethylene	~									

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of Test	Maximum daily	value	Avg. daily Value	).
	Absent	Flesem	(1 min- imum)	grab)	(method #)	Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	~									
26. 1,1,2 Trichloroethane	V									
27. Trichloroethylene	V									
28. Vinyl Chloride	V									
29. Acetone	V							<u> </u>		
30. 1,4 Dioxane	V									
31. Total Phenols	~									
32. Pentachlorophenol	~								<i>J</i>	
33. Total Phthalates <sup>5</sup> (Phthalate esthers)	~									
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	~								`.	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	~									
a. Benzo(a) Anthracene	V									
b. Benzo(a) Pyrene	~									
c. Benzo(b)Fluoranthene	~						Å			
d. Benzo(k) Fluoranthene	~									
e. Chrysene	~									

<sup>&</sup>lt;sup>5</sup>The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of	Maximum daily v	/alue	Average daily va	lue
	Trosont		(1 min- imum)	grab)	(method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene										
g. Indeno(1,2,3-cd) Pyrene										
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		V	5	grab	8270	<1	<10			
h. Acenaphthene		~	5	grab	8270	<1	<10			
i. Acenaphthylene		~	5	grab	8270	<1	<10			
j. Anthracene		~	5	grab	8270	<1	<10		. ••	
k. Benzo(ghi) Perylene		V	5	grab	8270	<1	<10			
l. Fluoranthene		V	5	grab	8270	<1	<1			
m. Fluorene		V	5	grab	8270	<1	<10			
n. Naphthalene-		~	5	grab	8270	<1	<10			
o. Phenanthrene		~	5	grab	8270	<1	72			
p. Pyrene		~	5	grab	8270	<1	<10			
37. Total Polychlorinated Biphenyls (PCBs)	~									
38. Antimony	~									
39. Arsenic	~									
40. Cadmium	~									
41. Chromium III	V									
42. Chromium VI	~					<u> </u>			· · · · · · · · · · · · · · · · · · ·	

PARAMETER Believ Abser	Believe	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
	Absent	Tresent	(1 min- imum)	grab)	Used (method #)		concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	~									
44. Lead	~									
45. Mercury	~									
46. Nickel	V									
47. Selenium	~									
48. Silver									-	11
49. Zinc	~									
50. Iron	<b>V</b>									
Other (describe):		V	5	grab	8270	<10	72	N/A	N/A	N/A

c) For discharges where metals are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? YN_	If yes, which metals?
Step 2: For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI.  What is the dilution factor for applicable metals?  Metals:  DF:	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?  YNV If "Yes," list which metals:

4. Treatment system informa	tion. Please de	escribe the treatme	nt system using sepai	rate sheets as necessa	ry, including:		<del></del>
a) A description of the treatm	nent system, inc	luding a schemation	of the proposed or e	xisting treatment syst	tem:		
See atttaced Letter provided							
•							
b) Identify each applicable	Frac. tank	Air stripper	Oil/water se	parator	Equalization tanks	Bag filter	GAC filter
treatment unit (check all						<b>/</b>	\ \ \ \ \
that apply):					<u></u>		
	Chlorination	Dechlorination	on Other (pleas	e describe):			.•
	<u> </u>			. v·-		<u> </u>	
c) Proposed average and ma		ites (gallons per m	inute) for the dischar	ge and the design flo	w rate(s) (gallons per	minute) of the treatme	nt system:
Average flow rate of discharge	ge_50	Maximum flow	rate of treatment syste	em /5 De	esign flow rate of treat	ment system <u>73</u>	<del></del>
d) A description of chemical	additives being	used or planned to	o be used (attach MS)	DS sheets):			* .
None							
							······································
5. Receiving surface water(s)	Please provid	le information abo	ut the receiving water	r(s), using separate sh	neets as necessary:		
		Direct	Within facility	Storm drain 🗸	River/brook	Wetlands	Other (describe):
a) Identify the discharge path	iway.	Direct	Within facility				see below*
						<u> </u>	
b) Provide a narrative descrip	otion of the disc	harge pathway, in	cluding the name(s)	of the receiving water	s:		
*Effluent of GWTS flows via						ore River.	
Ellinetic of O M 19 Hows Are	LLE IUDOUING	20 10 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		<u> </u>	•		
							1.1 x 30 x x x x x x x x x x x x x x x x x x x
						<u> </u>	

<ul> <li>c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:</li> <li>1. For multiple discharges, number the discharges sequentially.</li> <li>2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water</li> <li>The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS to mapping), such as surface waters, drinking water supplies, and wetland areas.</li> </ul>	ppographica	al
d) Provide the state water quality classification of the receiving water_SB,		
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving watercfs  Please attach any calculation sheets used to support stream flow and dilution calculations.	:	
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes No If yes, for which pollutant(s)?  Pathogens  Is there a TMDL? Yes No If yes, for which pollutant(s)?		
6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II a	and VII.	
a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? YesNo  Has any consultation with the federal services been completed?		bitat?
b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the Yes No   Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes	discharge? _ No	

applemental information.: ase provide any supplemental information. Attach any analytical data used to support the app	lication. Attach any certification(s) r	equired by the general permit.
Attached you will find the following information; (1) NPDES Exclusion #MA 051-050, (2) la cordancw with exlusion permit, (3) analytical laboratory reports of soil samples collected ons coundwater interface and within groundwater table), and (4) US EPA Total Max. Daily Loads.	boratory reports of untreated influent its (soil sample points were located a	collected and sampled in
<b>5</b>		
		•
		\$
		*. -



### U.S. ENVIRONMENTAL PROTECTION AGENCY

New England
1 Congress Street
Suite 1100

Boston, MA 02114-2023
Telephone: (617) 918-1649

FAX: (617) 918-1505

5/9/05 (10:35)

ro: Mr. Phil Pe	terson		•	
OFFICE BATG ENV	iron mental	ing the second of the second o	en en eksterne en eksterne Eksterne en eksterne en ek	
TELEPHONE:	THE CAN DESCRIPTION OF	1946 1920 - 1950 1930 - 1950 1930 - 1930		
FROM: Michael J.O	Brien, Municipa	1 Perm	its Br.	•
TELEPHONE:_	617-918-1649			

Subject: NPDES Permit Exclusion Letter for Brainfree-Weymouth

Pump Station

Comments: 4 pages tollow. Mr. Radville will be

copied as owner contact, Mr. Dugan as general contractor

בששב-ביש- וחוד

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1

1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

AND

DATE: May 9, 2005

Mr. Mark Radville
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

Re: Braintree-Weymouth Pump Station 27 Kilby St.; Quincy, Massachusetts

Mr. Phillip Peterson
Project Manager
BATG Environmental, Inc.
448 Broadway
Taunton, Massachusetts 02780

NPDES Exclusion #MA-051-050

Dear Mr. Radville and Mr. Peterson:

As of June 3, 2002, the On-Scene Coordinators (OSC's) in the Emergency Planning & Response Branch of EPA-New England (EPA-NE) have no longer been issuing National Pollutant Discharge Elimination (NPDES) Permit "Exclusion" letters in the states of Massachusetts and New Hampshire. EPA is, however, still the permitting authority for point source water discharge permits in these two states. Since the early 90's, EPA-NE granted exclusions to the NPDES permit process under the authority of Section 122.3(d) of the NPDES regulations to allow expedited testing and cleanup of contaminated sites for which a discharge of groundwater and incidental surface water was required following appropriate treatment. This process was necessary due to the large number of cleanups requiring permits and the time-frame necessary to issue individual NPDES permits.

Exclusion letters were developed for each site following submission and review of an application with various site information, test data, treatment type, and other facts. Discharge effluent limits, monitoring requirements and other special conditions were set out in the letters signed by the OSC in charge. EPA-NE has determined that we can no longer issue these exclusions except in circumstances where a response action is under the direct control of the OSC (either EPA or the USCG) as outlined in the National Contingency Plan (NCP). These determinations are made following notification to the National Response Center of a release of a reportable quantity of oil or hazardous substances.

We are in the process of developing a new General NPDES Permit to cover short and long term discharges from remediation activities. We expect the lead time needed to become covered by the General Permit to be about the same as the current exclusion waiver process. We hope to have the General Permit published in the Federal Register as final and effective in the near future. Until the effective date of the new General Permit, EPA-NE is requesting that you provide treatment of any such discharges to waters of the United States consistent with the limits and other requirements traditionally established in the Exclusion letters process.

Please refer to "Attachment A" to this letter for the interim requirements for discharge.

If you have any questions or concerns about this process please contact Michael J. O'Briem of the NPDES Program at (617) 918-1649. Additional contacts for the NPDES Program include Olga Vergara for MA issues at (617) 918-1519 and Shelley Puleo for NH issues at (617) 918-1545. Thank you for your cooperation as we develop this new permit.

.Sincerely yours,

Roger Janson, Associate Director
MUNICIPAL PERMITS BRANCH

cc. State of MA/or State of NH

בינייטב במחק דמייטב

# \*\*\*\*Braintree-Weymouth Pump Station\*\*\*\* 27 Kilby Street Quincy, Massachusetts

#### ATTACHMENT A

The discharge(s) referenced in the accompanying letter must be in accordance with the following provisions:

- 1. No discharge of oil, sufficient to cause a sheen (as defined in 40 CFR 110), occurs to the drainage system. The discharge of a sheen of oil or gasoline constitutes an oil spill and must be reported immediately to the National Response Center (NRC) at (800) 424-8802.
- 2. Security provisions are maintained to assure that system failure, vandalism, or other incidents will be addressed in a timely fashion, preventing the loss of oil or contaminated water to the drainage system.
- The flow rate shall be maintained within acceptable operating parameters and shall not exceed the design flow of the treatment system. There shall be no bypass of the treatment system unless unavoidable to prevent loss of life, personal injury, or severe property damage. No filter backwash or other maintenance waters shall be discharged without treatment.
- 4. Sampling and analysis, in accordance with EPA Methods, must be performed for the following chemicals with the listed limits being applicable:

Total Suspended Solids (TSS)		tt.	50 ppm
Total Petroleum Hydrocarbons (TF	<b>PH)</b>		5 ppm
Polynuclear Aromatic Hydrocarbon	grafinite of	II Total Isomers	100 ppb
Benzene		÷	5 ppb
Toluene	e ger en en skriver	Addition to the second	**************************************
Ethyl Benzene	. •		<b>*</b>
Xylenes		<b>4</b> .	•
The total for Benzene, Toluene, Ethyl Benzene, and Xylene	es (BTEX)		100 ppb
Naphthalene			20 ppb

Should sampling indicate the presence of additional chemicals, discharge concentrations should not exceed the Federal Drinking Water Standards (MCL's) or 100 ppb, whichever is lower, in the effluent.

Solids - These waters shall be free from floating, suspended, and settleable solids in concentrations or combinations that would impair any use assigned to this class, that would cause esthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom sediments.

Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are esthetically objectionable conditions or that would impair the use assigned to this class.

Laboratory samples must be obtained from the influent to treatment, and from the effluent to the drainage system once each day for the first, third and sixth day of discharge. These samples must be analyzed with a 72-hour turnaround time. If the system is working properly, sampling for the remainder of the month shall be weekly and then monthly. Thereafter. The turnaround time for these samples shall ensure that no more than seven days pass between the sampling event and when the results are received and reviewed by the contractor.

If analysis indicates that the effluent limits have been exceeded, then the system must be shut down immediately and the problem corrected. Upon restarting the system, a sample must be taken and there must be 24 hour turnaround for the results. If the analysis indicates that the problem has been corrected, then the sampling schedule shall resume. If not, then the system shall be shut down again and repaired.

Analytical Reports, with quality control information, are to be reported to EPA and the MADEP or NHDES Project Manager by the 28th of the following month. Reports to EPA should be sent to:

Municipal Permits Branch (CMP)
ATTN: Michael J. O'Brien
Office of Ecosystem Protection
U. S. Environmental Protection Agency
One Congress St., Suite 1100
Boston, MA 02114-2023

Please include assigned reference # on all correspondence.

6. You, or your contractor, must maintain copies of all analytical reports, and quality control information for a period of 3 years from the date of the report.

You should consider these requirements to be in effect immediately.



#### **CHAIN OF CUSTODY RECORD**

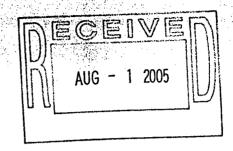
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040 Fax (860) 645-0823

		-14		
<u> Data Delivery</u>	/ (cne	ck one):		•
Fax #:				<u></u>
Fmail:				
	1.5	1.	,.	-
Format:	∃ E	xcel 🗌	] Pdf	Gis Ke
		Fax #:	Fax #:	Email:

Email: service@phoenixlabs.com **Client Services (860) 645-8726** Environmental Laboratories, Inc. Proiect: Customer: Phone #: Report to: TALLA LAOTALLATA TAUNTON Fax #: Invoice to: of lates in the line of the lates of the lat Client Sample - Information - Identification Analysis Schild West Its & Take S. Lee Cal Tile Barri Telegrici Date 7/25 S Request Sampler's Signature Party I d Ed charage Matrix Code: & Soll Schulfter & Just Proper ww=wastewater\_S=soil/solid O=Oil DW=drinking water X=Other SL=sludge \_\_\_\_A=air \_\_\_ GW=groundwater PARTY Time Sample Date Customer Sample Phoenix Matrix Sampled Sampled Identification Sample # #2 4 Requirements for MA Requirements for CT/RI . Time: Date: Accepted by GW-1 Relinguished by: Res. Criteria 1 Day GW-2 **GW Protection** 2 Days\* GW-3 **GA Mobility** 3 Days\* S-1 GB Mobility Standard SW Protection Other Comments, Special Requirements or Regulations: Res. Vol. MCP Certification Ind. Vol. \* Surcharge Applies



Thursday, July 28, 2005



Batq 448 Broadwav Taunton

MA 02780

Attention: Mr Phil Peterson

Sample ID#: AG57927-57928

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

**Phyllis Shiller** 

**Laboratory Director** 

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

NY Lab Registration #11301

RI Lab Registration #63

NH Lab Registration #213693-A,B

ME Lab Registration #CT-007

NJ Lab Registration #CT-003

PA Lab Registration #68-03530





#### Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

### Analysis Report July 28, 2005

FOR:

Attn: Mr Phil Peterson BATG Environmental Inc. 448 Broadway Taunton, MA 02780

Sample Information		<b>Custody Infor</b>	<u>mation</u>	<u>Date</u>	<u>Time</u>
Matrix:	WATER	Collected by:	JM	07/25/05	9:30
Location C	ode: BATGTAUN	Received by:	SW	07/25/05	15:15
Ruch Rogu	oct. RIISH9/HR	Analyzed by:	see "Ry" helow		

P.O.#: 05

05-110

SDG I.D.: GAG57927

Phoenix I.D.: AG57927

Labora	tory J	<u>Data</u>
--------	--------	-------------

Client ID: B/W PUMP STATION CB #1

Parameter	Result	$\mathbf{RL}$	Units	Date Ti	me By	Reference
Total Suspended Solids	290	50	mg/L	07/26/05	PC/KL	SM2540D
Semi-Volatile Extraction	Completed		The Oile of States	07/25/05	TP	SW3510/3520
Extraction of TPH MOD 8100	Completed			07/25/05	AJ	3550/5030
TPH by GC (Extractable	Products)		enden France France France	· <del>斯</del> -	*, **	
Aviation Fuel/Kerosene	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	**	0.5	mg/L	07/26/05	JRB	8100Modified
Fuel Oil #4	ND	0.5	$\mathbf{mg/L}$	07/26/05	JRB	8100Modified
Fuel Oil #6	ND	0.5	$\mathbf{mg}/\mathbf{L}$	07/26/05	JRB	8100Modified
Motor Oil	ND	0.5	$\mathbf{mg/L}$	07/26/05	JRB	8100Modified
Other Oil (Cutting & Lubricating)	ND	0.5	$\mathbf{mg}/\mathbf{L}$	07/26/05	JRB	8100Modified
Unidentified	2500	0.5	mg/L	07/26/05	JRB	8100Modified
QA/QC Surrogates				1		
% n-Pentacosane	Diluted out	1 (2)	%	07/26/05	JRB	8100Modified
	124					
Aromatic Volatiles w/Na	<u>pthalene</u>			; ; ;		
Benzene	ND	10	ug/L	07/26/05	RM	SW 8260
Ethyl Benzene	ND	10	ug/L	07/26/05	RM	SW 8260
Methyl Tert Butyl Ether (MTBE)	ND	20	ug/L	07/26/05	RM	SW 8260
Naphthalene	ND	10	ug/L	07/26/05	RM	SW 8260
o-Xylene	ND	10	ug/L	07/26/05	RM	SW 8260
p&m-Xylene	ND	10	ug/L	07/26/05	RM	SW 8260
Toluene	ND	10	ug/L	07/26/05	RM	SW 8260
QA/QC Surrogates			egt -			
% BFB (Surrogate Recovery)	95		%	07/26/05	RM	SW 8260

Client ID: B/W PUMP STA	Phoenix I.D.: AG57927				
Parameter	Result	$\mathbf{RL}$	Units	Date Tim	e By Reference
					er of the first of
Polynuclear Aromatic I	<u>IC</u>	a distribution		A real from the second	
2-Methylnaphthalene	53	50	ug/L	07/26/05	KCA SW 8270
Acenaphthene	ND	50	ug/L	07/26/05	KCA SW 8270
Acenaphthylene	ND	50	ug/L	07/26/05	KCA SW 8270
Anthracene	ND	50	ug/L	07/26/05	KCA SW 8270
Benz(a)anthracene	ND	50	ug/L	07/26/05	KCA SW 8270
Benzo(a)pyrene	ND	50	ug/L	07/26/05	KCA SW 8270
Benzo(b)fluoranthene	ND	50	ug/L	07/26/05	KCA SW 8270
Benzo(ghi)perylene	ND	50	ug/L	07/26/05	KCA SW 8270
Benzo(k)fluoranthene	ND	50	ug/L	07/26/05	KCA SW 8270
Chrysene	ND	50	ug/L	07/26/05	KCA SW 8270
Dibenz(a,h)anthracene	ND	50	ug/L	07/26/05	KCA SW 8270
Fluoranthene	ND	50	ug/L	07/26/05	KCA SW 8270
Fluorene	ND	50	ug/L	07/26/05	KCA SW 8270
Indeno(1,2,3-cd)pyrene	ND	50	ug/L	07/26/05	KCA SW 8270
Naphthalene	ND	50	ug/L	07/26/05	KCA SW 8270
Phenanthrene	72	50	ug/L	07/26/05	KCA SW 8270
Pyrene	ND	50	ug/L	07/26/05	KCA SW 8270
QA/QC Surrogates					en e
% 2-Fluorobiphenyl	*16	•	%	07/26/05	KCA SW 8270
% Nitrobenzene-d5	*17		%		KCA SW 8270
% Terphenyl-d14	*13		%	07/26/05	KCA SW 8270

#### **Comments:**

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

July 28, 2005

<sup>\*\*</sup>Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles diesel fuel / fuel #2.

<sup>\*</sup>Poor surrogate recovery was observed for this sample. A duplicate analysis was run with similar results.





### Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

### **Analysis Report**

July 28, 2005

FOR:

Attn: Mr Phil Peterson

**BATG Environmental Inc.** 

448 Broadway

Taunton, MA 02780

Sample	Inform	atior

**Custody Information** 

Date

Time

Matrix:

WATER

JM Collected by:

07/25/05

9:45

**Location Code: BATGTAUN** 

Received by: SW 07/25/05

15:15

Rush Request: RUSH24HR

Analyzed by:

see "By" below

P.O.#:

05-110

### **Laboratory Data**

**SDG I.D.: GAG57927** 

Phoenix I.D.: AG57928

Client ID:

**B/W PUMP STATION CB #2** 

Parameter	Result	$\mathbf{RL}$	Units	Date Time	e By	Reference
Total Suspended Solids	420	10	mg/L	07/26/05	PC/KL	SM2540D
MADEP MCP 8260 Certification	Completed	14 m	7. <b>4</b> 6.00 7.48.00 7.40.00 7.40.00	07/26/05	RM	MCP
MADEP MCP 8270 Certification	Completed	a' 	이 (* ) 위험 - 발표 - 본자	07/27/05	KCA	MCP
Semi-Volatile Extraction	Completed		Pro-	07/25/05	AJ	SW3510/3520
Extraction of TPH MOD 8100	Completed			07/25/05	AJ	3550/5030
TPH by GC (Extractable	Products)					
Aviation Fuel/Kerosene	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Fuel Oil #4	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Fuel Oil #6	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Motor Oil	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Other Oil (Cutting & Lubricating)	ND	0.5	mg/L	07/26/05	JRB	8100Modified
Unidentified	ND	0.5	mg/L	07/26/05	JRB	8100Modified
QA/QC Surrogates % n-Pentacosane	96		% %	07/26/05	JRB	8100Modified
Aromatic Volatiles w/Na	pthalene		·		1	
Benzene	ND	1.0	ug/L	07/26/05	RM	SW 8260
Ethyl Benzene	ND	1.0	ug/L	07/26/05	RM	SW 8260
Methyl Tert Butyl Ether (MTBE)	ND	2.0	ug/L	07/26/05	$\mathbf{R}\mathbf{M}$	SW 8260
Naphthalene	ND	1.0	ug/L	07/26/05	$\mathbf{R}\mathbf{M}$	SW 8260
o-Xylene	ND	1.0	ug/L	07/26/05	RM	SW 8260
p&m-Xylene	ND	1.0	ug/L	07/26/05	RM	SW 8260
Toluene	ND	1.0	ug/L	07/26/05	RM	SW 8260

Client ID: B/W PUMP S	Phoe	Phoenix I.D.: AG57928				
Parameter	Result	RL	Units	Date Tir	ne By	Reference
QA/QC Surrogates % BFB (Surrogate Recovery)	92		%	07/26/05	RM	SW 8260
Polynuclear Aromatic	c <b>HC</b>					
2-Methylnaphthalene	ND	10	ug/L	07/26/05	KCA	SW 8270
Acenaphthene	ND	10	ug/L	07/26/05	KCA	SW 8270
Acenaphthylene	ND	10	ug/L	07/26/05	KCA	SW 8270
Anthracene	ND	10	ug/L	07/26/05	KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	07/26/05	KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	07/26/05	KCA	SW 8270
Benzo(b)fluoranthene	ND	10	ug/L	07/26/05	KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	07/26/05	KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	07/26/05	KCA	SW 8270
Chrysene	ND	10	ug/L	07/26/05	KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	07/26/05	KCA	SW 8270
Fluoranthene	ND	10	ug/L	07/26/05	KCA	SW 8270
Fluorene	ND	10	ug/L	07/26/05	KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	07/26/05	KCA	SW 8270
Naphthalene	ND	10	ug/L	07/26/05	KCA	SW 8270
Phenanthrene	ND	10	ug/L	07/26/05	KCA	SW 8270
Pyrene	ND	10	ug/L	07/26/05	KCA	SW 8270
QA/QC Surrogates			選択し、100mm (100mm) (104mm)			
% 2-Fluorobiphenyl	77		<b>%</b>	07/26/05	KCA	SW 8270
% Nitrobenzene-d5	74		%	07/26/05	KCA	SW 8270
% Terphenyl-d14	87		<b>%</b>	07/26/05	KCA	SW 8270

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

July 28, 2005





#### Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

### QA/QC Report

July 28, 2005

QA/QC Data

SDG I.D.: GAG57927

**MS Dup** 

arameter	Blank	LCS %	MS Rec %	Rec %	RPD
\/QC Batch Sample No: AG50654 (A	G57927, AG57928)				
PH by GC (Extractable Pro	ducts)				
viation Fuel/Kerosene	ND				
ıel Oil #2/ Diesel Fuel	ND		<b>42</b>	59	<b>33.7</b>
ıel Oil #4	ND				
ıel Oil #6	ND				
otor Oil	ND				
ther Oil (Cutting & Lubricating)	ND				
nidentified //	ND	er er v			
omment: lcs and lcs duplicate were per	rformed instead of ma	atrix spike and matr	ix spike duplicate		
A/QC Batch Sample No: AG57927 (A	G57927, AG57928)		, - <del></del>		e e a j
olynuclear Aromatic HC	i da Maria Mercala				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Methylnaphthalene	ND	11 <b>H</b> 22 11 <b>H</b> 224 12 <b>H</b> 24 13 <b>H</b> 24 14 <b>H</b> 24 15 <b>H</b> 24 16 <b>H</b> 24 17 <b>H</b> 24 18 <b>H</b> 24	: 1 -	*:	
cenaphthene	ND	#1	101	92	9.3
cenaphthylene	ND				5 / T
nthracene	ND				1:10
enzo(a) anthracene	ND	•			
enzo(a) pyrene	ND				d.
enzo(b) fluoranthene	ND				
enzo(g,h,i) perylene	ND				
enzo(k) fluoranthene	ND				
hrysene	ND	**			
	M ND				
luoranthene	ND				
luorene	ND	; ;			·
ndeno(1,2,3-cd) pyrene	ND				
aphthalene	ND				
henanthrene	ND				•
yrene	ND		102	92	10.3
2-Fluorobiphenyl	85		88	85	3.5
Nitrobenzene-d5	89		92	87	5.6
7 Terphenyl-d14	109		112	106	5.5

there are any questions regarding this data, please call Phoenix Client Services at extension 200.

3 - Matrix Spike

3 Dup - Matrix Spike Duplicate

'D - Relative Percent Difference

S - Laboratory Control Sample

Phyllis Shiller, Laboratory Director

July 28, 2005

.abo	ratory Name: F			nod Report Certific ories, Inc. Proje	ect Number:	
This		B/W Pump Statle cations for the follow		MAD Laboratory Sample ID	EP RTN1: Number(s)]	
 3amp	le Matrices:	Groundwater 🗸	Soil/Sediment	Drinking Water	Other:	
	ICP SW-846	☐ 8260B	☐ 8151A	□ 8330	<b>☑</b> 6010B	<b>▼</b> 7470A/1A
M	ethods Used	☐ 8270C	☐ 8081A	□ VPH	<u></u> 6020	☐ 9014M2
	ecified in MADEP pendium of	8082	☐ 8021B	☐ EPH	☐ 7000S3	☐ Other
Analy	tical Methods. k all that apply)	2 M - SW-846 Met 3 S - SW-846 Met	hods 7000 Series	P Physiologically Avai List individual method	and analyte	
				I C is required for '		Certainty" status
A	Were all samp that described	oles received by on the Chain-of	the laboratory in f-Custody docur	n a condition cons mentation for the d	istent with lata set?	☑ Yes □ No
В	included in this	s report followed arrative QC data	I, including the i	specified analytica requirement to not eet appropriate per	e and	Refer to attached MCP Certification (s).
Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?						Refer to attached MCP Certification (s).
	A respons	se to questions l	D and E below i	s required for "Pre	sumptive Cert	ainty" status
D	D Were all QC performance standards and recommendations for the specified methods achieved?					Refer to attached MCP Certification (s).
Ε	Were results for all analyte-list compounds/elements for the specified method(s) reported?					
	All N	IO answers must be	addressed in an a	ttached Environmental	Laboratory case	narrative.
ino	uiry of those re	esponsible for o	obtaining the i	penalties of perju- nformation, the n ge and belief, acc	naterial conta	I upon my personal ined in this mplete.
		Zie Shill			Laboratory D	:
S	ignaturo.	10000				





#### Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

### **Certification Report**

July 28, 2005

**SDG I.D.: GAG57927** 

H.

#### **ADEP MCP 8260 Certification**

Were all QA/QC procedures required (as specified in BWSC-CAM Table II A-1) followed including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

8260 Narration:

The client requested a shortened list of compounds.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

**Printed Name** 

Raman Makol

Position:

Chemist

Date:

7/26/2005 10:31:32 AM

#### **ADEP MCP 8270 Certification**

Were all QA/QC procedures required (as specified in BWSC-CAM Table II B-1) followed including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

8270 Narration:

**Initial Calibration:** 

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: None

Continuing Calibration:

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: 2,4,6-tribromophenol

An LCS/LCSD was performed instead of a MS/MSD with the ten compounds that historically have been used to monitor performance.

The client requested PAH compounds only. The laboratory in this case defines "target compounds" as the PAH compounds. Because only the base neutral PAHs are requested only the base surrogates are evaluated and reported.

Note that recoveries for the surrogates on sample AG57927 were low on both the original and the re-extracted samples. A matrix interference is suspected.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

**Printed Name** 

Keith Aloisa

Position:

Chemist

Date:

7/27/2005 9:16:14 AM





Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

### **Certification Report**

**July 28, 2005** 



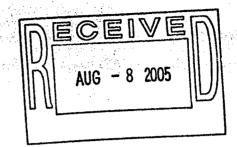
### **CHAIN OF CUSTODY RECORD**

For East Middle Turnnike P.O. Box 370, Manchester, CT 06040

	Terriby ( ) 'a
	Data Delivery (check one):
	Fax #:
•	Email:
	Famous C Sycol C Poff C Gis Key

PHUENIA ***									Email: service@phoenixlabs.com Fax (860) 645-0823													•		Email						
Environmental Laboratories, Inc.										Client Services (860) 645-8726																		Pdf	<u> </u>	is Key
Customer: BATH TANAMAN MA 02870								Project: BW PUMP STATION Report to: PHIL/ JESSE															ect P.0 ne #:	0: 05-110 (508)82.1-7412						
Address:									Invoice to: TAUNTON												Fax#: <u>L 886 7565</u>								7	
		lient Sample	- Information	on - Identif	ication					_!_	- 25		//	//	150015			//	//	//	//	//		//	CHING	//	//	//	John	./
Sampler's Signature Date \$2.0									Analy Requ					/	/ /		/			/							(g) (g)	KE THE	Sep.	
DW:	rix Code: =drinking water =groundwater	<b>WW</b> =wastew <b>≲L</b> =sludge	ater <b>S</b> =so <b>A</b> =air	oil/solid <b>O</b>	=Oil :Other				·		4	2										\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ottero Carrier	RING OF	Parison P	\$ \$ 11 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	SORRILL	1200 V	15 00 15 00	Strie Britis
Item #	Phoenix		stomer Sar		Sample Matrix		Time Sampled	/.		<b>X</b>	(B)	3	N.C.			_	_	<u> </u>		/ s <sup>à</sup>	10 10 10 10 10 10 10 10 10 10 10 10 10 1	53/3	SO SO	RIV G	Pring/A	\$ <sup>\$</sup> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	80./	arilo /
=	Sample # 59047		Identification			1	1030	X	X	X	X	×				*							3	d						<del></del>
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Thursday, August 04, 2005

Batq 448 Broadway

**Taunton** 

MA 02780

Attention: Mr Jesse Maggs

Sample ID#: AG59647-59648

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

**Phyllis Shiller** 

**Laboratory Director** 

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

NY Lab Registration #11301

RI Lab Registration #63

NH Lab Registration #213693-A,B

ME Lab Registration #CT-007

NJ Lab Registration #CT-003

PA Lab Registration #68-03530





## **Analysis Report**

August 04, 2005

FOR:

Attn: Mr Jesse Maggs **BATG Environmental Inc.** 

448 Broadway

Taunton, MA 02780

Sample Information	Ī
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WATER

Collected by:

**Date** 

Time

Matrix:

JM Received by:

08/02/05

10:30

**Location Code: BATGTAUN** 

SW

08/02/05

15:40

Rush Request: RUSH24HR

Analyzed by: see "By" below

**Custody Information** 

**SDG I.D.: GAG59647** 

P.O.#:

05-110

**Laboratory Data** 

Phoenix I.D.: AG59647

Client ID:

**B/W PUMP STATION 080205-INF** 

Parameter	Result	RL	Units	Date	Time	By :	Reference
Total Suspended Solids	230	5.0	mg/L	08/03/05		KL:	SM2540D
Semi-Volatile Extraction	Completed		The State of	08/03/05		D/T	SW3510/3520
Extraction of TPH MOD 8100	Completed		den je svedski Bio sa spraktiva Sastania	08/02/05		AJ/C	3550/5030
TPH by GC (Extractable	Products)			₩.		- 1	ि क्रिकेट्रिकेट्रिकेट स्थान है। जिल्लाहरू
Aviation Fuel/Kerosene	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Fuel Oil #4	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Fuel Oil #6	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Motor Oil	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Other Oil (Cutting & Lubricating)	ND	0.5	mg/L	08/03/05		JRB	8100Modified
Unidentified	ND	0.5	mg/L	08/03/05		JRB	8100Modified
QA/QC Surrogates	<i>i</i>			\$1			į.
% n-Pentacosane	72		%	08/03/05		JRB	8100Modified
Aromatic Volatiles w/Na	<u>pthalene</u>			** #		ı	den.
Benzene	ND	1.0	ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
Ethyl Benzene	ND	1.0	ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
Methyl Tert Butyl Ether (MTBE)	ND	2.0	ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
Naphthalene	ND	1.0	" ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
o-Xylene	ND	1.0	ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
p&m-Xylene	ND	1.0	ug/L	08/02/05		$\mathbf{R}/\mathbf{P}$	SW 8260
Toluene	ND	1.0	ug/L	08/02/05		R/P	SW 8260
QA/QC Surrogates % BFB (Surrogate Recovery)	99		%	08/02/05		R/P	SW 8260

Client ID: B/W PUMP STATI	. <b>F</b>	Phoenix I.D.: AG59647								
Parameter	Result	RL	Units	Date	Time By	Reference				
		11.4	1.5			· · · · · · · · · · · · · · · · · · ·				
<u>Polynuclear Aromatic HC</u>						100				
2-Methylnaphthalene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Acenaphthene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Acenaphthylene	ND	20	ug/L	08/03/05	KCA	The BOOK HARDS CO.				
Anthracene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Benz(a)anthracene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Benzo(a)pyrene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Benzo(b)fluoranthene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Benzo(ghi)perylene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Benzo(k)fluoranthene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Chrysene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Dibenz(a,h)anthracene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Fluoranthene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Fluorene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Indeno(1,2,3-cd)pyrene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Naphthalene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Phenanthrene	ND	20	ug/L	08/03/05	KCA	SW 8270				
Pyrene	ND	20	ug/L	08/03/05	KCA	SW 8270				
QA/QC Surrogates	24 4 4 <u>.</u> .	e de la companya de l	<b>%</b>	· #-:						
% 2-Fluorobiphenyl	15*	.5	8485	08/03/05	if	7 Tab				
% Nitrobenzene-d5	30		<b>%</b>	08/03/05	一点,一点点点,就是"	op Talk Taley.				
% Terphenyl-d14	11*	*	%	08/03/05	KCA	SW 8270				

#### **Comments:**

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

August 04, 2005

111

<sup>\*</sup>Poor surrogates were observed for this sample. The sample was re-extracted with similar results.

	MADEP M	CP Analytical Me	ethod Report Certif	ication Form	
Laboratory Name:				ect Number:	
Project Name:	B/W Pump Sta	ation	MAI	DEP RTN1:	
This Form provides cer AG59647, AG59648	tifications for the fo	llowing data set: [list	Laboratory Sample ID	Number(s)]	
Sample Matrices:	☑ Groundwater	Soil/Sediment	☐ Drinking Water	Other:	
MCP SW-846	<b>✓</b> 8260B	☐ 8151A	□ 8330	☐ 6010B	☐ 7470A/1A
Methods Used	<b>✓</b> 8270C	☐ 8081A	☐ VPH	6020	☐ 9014M2
As specified in MADEP	□ 8082	☐ 8021B	☐ EPH	☐ 7000S3	<b>✓</b> Other
Compendium of Analytical Methods. (check all that apply)	2 M - SW-846 M 3 S - SW-846 M	flethods 7000 Series	EP Physiologically Ava List individual method	and analyte.	
An affirmative	e response to q	uestions A, B, ar	nd C is required for	"Presumptive	Certainty" status
A Were all san that describe	nples received bed on the Chain	oy the laboratory -of-Custody doc	in a condition con umentation for the	sistent with data set?	☑ Yes ☐ No
included in t discuss in a standards or	his report follow narrative QC da r guidelines?	red, including the ata that did not n	specified analytice requirement to no neet appropriate pe	erformance	Refer to attached MCP Certification (s).
"Presumptiv document C for the Acqu	e Certainty", as AM VII A, "Qua isition and Rep	described in Se lity Assurance a orting of Analytic	ort meet all the req ction 2.0 of the MA nd Quality Control al Data"?	OEP Guidelines	Refer to attached MCP Certification (s).
A respo	nse to question	s D and E below	is required for "Pr	esumptive Cer	tainty" status
D Were all QC methods ac	performance s hieved?	tandards and re	commendations fo	r the specified	Refer to attached MCP Certification (s).
E Were result method(s) r		list compounds/	elements for the sp	pecified	y □ Yes 🗹 No
I, the undersigne	ed, attest under	r the pains and	information. the i	ıry that, based naterial conta	d upon my personal ined in this
Signature:	i i	n Cressil	ge and belief, acc	QA/QC Office	.42
A	Kathleen Cressi			Thursday, Aug	ust 04 2005





## Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040

Tel. (860) 645-1102 Fax (860) 645-0823

## **Certification Report**

August 04, 2005

SDG I.D.: GAG59647

#### **ADEP MCP 8260 Certification**

Were all QA/QC procedures required (as specified in BWSC-CAM Table II A-1) followed including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### 8260 Narration:

Client requested BTEX with napthalene only.

#### **Initial Calibration Verification:**

All SPCCs, CCCs and >90% of target compounds met criteria.

#### Continuing Calibration Verification:

All SPCCs, CCCs and >90% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.

The RPDs between the MS/MSD for some of the compounds may be greater than 20%. A dual concentrator with robotic autosampler was used in this case. One MS is analyzed on one concentrator and the MSD is analyzed on the other concentrator. The high RPDs can be attributed to possible differences between the two concentrators. Note that the majority of recoveries met criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Printed Name Raman Makol

Position: Chemist

Date: 8/3/2005 4:20:15 PM





## **Certification Report**

August 04, 2005

**SDG I.D.: GAG59647** 

#### ADEP MCP 8270 Certification

Were all QA/QC procedures required (as specified in BWSC-CAM Table II B-1) followed including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### 8270 Narration:

**Initial Calibration:** 

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: None

**Continuing Calibration:** 

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: benzyl alcohol, benzoic acid

For soil samples, the matrix spike and matrix spike duplicate were spiked with the ten compounds that historically have been used to monitor performance and the LCS was spiked with all of the target compounds using a 2nd source standard.

Acetophenone, aniline and azobenzene are not reported in the laboratory 8270 compound list.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Printed Name Keith Aloisa

Position: Chemist

**Date:** 8/3/2005 2:33:27 PM

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30 1 7 5





## **Analysis Report**

September 16, 2005

FOR:

Attn: Mr. Phil Peterson

**BATG Environmental Inc.** 

448 Broadway

Taunton, MA 02780

WATER

**Location Code: BATGTAUN** 

Rush Request: RUSH#

P.O.#:

Matrix:

05-110

**Custody Information** 

Collected by:

LB

09/12/05

09/13/05

Date

15:15

Time

Received by: see "By" below Analyzed by:

16:00

## **Laboratory Data**

**SDG I.D.: GAG68496** 

Phoenix I.D.: AG68496

Client ID:

**B/W RPS B/WRPS GWTS - I** 

Parameter	Result	RL	Units	Date	Time	Ву	Reference
Total Suspended Solids	.67	. 5	mg/L	09/14/05		<b>K</b> L	SM2540D
MADEP MCP 8260 Certification	Completed		and the second of the	09/15/05	,i	RM	MCP
Extraction of TPH MOD 8100	Completed		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	09/13/05		AM	3550/5030
TPH by GC (Extractable	Products)	4			•	F. J. 13	His American distribution
Aviation Fuel/Kerosene	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Fuel Oil #4	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Fuel Oil #6	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Motor Oil	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Other Oil (Cutting & Lubricating)	ND	0.5	mg/L	09/15/05		JRB	8100Modified
Unidentified	ND	0.5	$\mathbf{mg/L}$	09/15/05		JRB	8100Modified
QA/QC Surrogates	erija e	4					0 Inc. 2 2
% n-Pentacosane	62		%	09/15/05		JRB	8100Modified
Aromatic Vols. plus Nap	<u>hthalene</u>						Cilles 2
1,2-Dichlorobenzene	ND	1.0	ug/L	09/15/05		RM	SW 8260
1,3-Dichlorobenzene	ND	1.0	ug/L	09/15/05		RM	SW 8260
1,4-Dichlorobenzene	ND	1.0	ug/L	09/15/05		RM	SW 8260
Benzene	ND	1.0	ug/L	09/15/05		RM	SW 8260
Chlorobenzene	ND	1.0	ug/L	09/15/05	•	RM	SW 8260
Ethyl Benzene	ND	1.0	$\mathbf{ug}/\mathbf{L}$	09/15/05	;	RM	SW 8260
Naphthalene	ND	1.0	$\mathbf{ug}/\mathbf{L}$	09/15/05	;	RM	SW 8260
o-Xylene	ND	1.0	ug/L	09/15/05	;	RM	SW 8260
p&m-Xylene	ND	1.0	ug/L	09/15/05	•	RM	SW 8260

CHERT ID: D/W RFS D/WRFS	GM12-1			* .	Phoenix		AG68496
Parameter	Result	$\mathbf{RL}$	Units	Date	Time	$\mathbf{B}\mathbf{y}$	Reference
Toluene	ND	1.0	ug/L	09/15/05		RM	SW 8260
QA/QC Surrogates							* *
% BFB (SURROGATE RECOVERY)	95	•	%	09/15/05		RM	SW 8260

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

PAHs not analyzed due to lab error. Resamples taken 9-14-05 and received by lab 9-15-05.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director





## **Certification Report**

September 16, 2005

SDG I.D.: GAG68496

#### ADEP MCP 8260 Certification

Were all QA/QC procedures required (as specified in WSC-CAM Table II A-1) followed including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

8260 Narration:

**Initial Calibration Verification:** 

All SPCCs, CCCs and >90% of target compounds met criteria.

The following compounds had %RSDs >30%:

Continuing Calibration Verification:

All SPCCs, CCCs and >90% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.

The following compounds had %Deviations >30%:

All LCS recoveries were within 70-130 with the following exceptions:

The following compounds from the MCP analyte list were not performed: acetone, (TAME), Carbon disulfide, diethyl ether, diisopropyl ether, 1,4 dioxane, (ETBE), hexanone, (MIBK), and (THF).

The RPDs between the MS/MSD for some of the compounds may be greater than acceptance criteria. A dual concentrator with robotic autosampler was used in this case. One MS is analyzed on one concentrator and the MSD is analyzed on the other concentrator. The high RPDs can be attributed to possible differences between the two concentrators. Note that the majority of recoveries met criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

**Printed Name** 

Raman Makol

Position:

Chemist

Date:

9/15/2005 3:34:15 PM

MADEF	MCP Respon	nse Action A	nalytical Repor	t Certification	on Form
_aboratory Name: F	Phoenix Environn	nental Laborato	ries, Inc. Proje	ect #:	
	B/W RPS			EP RTN1:	
This Form provides certifi		ing data set: [list L			
AG68496, AG68497					
		e in a Company of the Company			
Sample Matrices:	Groundwater	Soil/Sediment	Drinking Water	Other:	
MCP SW-846	☑ 8260B	☐ 8151A	□ 8330	☐ 6010B	☐ 7470A/1A
Methods Used	☐ 8270C	☐ 8081A	☐ VPH	☐ 6020	9014M2
As specified in MADEP Compendium of	□ 8082	☐ 8021B	☐ EPH	☐ 7000S3	☐ 7196A
Analytical Methods. (check all that apply)	1 List Release Trac 2 M - SW-846 Meth 3 S - SW-846 Meth	od 9014 or MADEF	), if known P Physiologically Avail ist individual method a	lable Cyanide (PA and analyte	AC) Metho
An affirmative	response to que	stions A, B, and	C is required for	"Presumptive	Certainty" status
A Were all samp that described	les received by to on the Chain-of-	he laboratory in Custody docum	a condition consi entation for the d	stent with ata set?	☑Yes ☐ No
included in this discuss in a na standards or g	s report followed, arrative QC data juidelines?	including the re that did not med	pecified analytical equirement to note et appropriate per	e and formance	Refer to attached MCP Certification (s).
"Presumptive the MADEP do	Certainty", as de ocument CAM VI	scribed in Section I A, "Quality As:	meet all the requon 2.0 (a), (b), (c) surance and Qual f Analytical Data"?	and (d) of lity Control	Refer to attached MCP Certification (s).
D VPH and EPH without signific	Methods only: \cant modification	Was the VPH or s (see Section	EPH Method cor 11.3 of respective	nducted Methods)	Refer to attached MCP Certification (s).
A respon	se to questions E	and F below is	required for "Pre	sumptive Cert	tainty" status
E Were all QC pmethods achie		dards and reco	mmendations for	the specified	Refer to attached MCP Certification (s).
F Were results method(s) rep		-	ements for the spe	ecified	☐ Yes ☑ No
			attached Environmen		
I, the undersigned inquiry of those re report is, to the be	sponsible for o	btaining the in	formation, the m	aterial contai	upon my personal ined in this analytica
Authorized Signature:	BL Shill		Date: I	Friday, Septen	nber 16, 2005
Printed Name: Ph	yllis Shiller	;		Laboratory Dir	
Printed Name: Ka	thleen Cressia	,	Position:	QA/QC Office	r

CAM VII A, rev. 3.2



## **CHAIN OF CUSTODY RECORD**

Temp ( Pg of

PHOE Environmental	Labor	X Jatories In			5		nail: s	ervice	@ph	oenix	labs.c	om	Fax	anche: x (860 <b>5-87</b>	) 645						□ R	Fax Ema	#: iii:					_ _
Customer: BATG En				. ,	<del>.</del>	-			3/W			(000)	, 04	3-07						Proi		mat:	05			<u>J</u> Pat		Gis Key
Address: 448 Br							Ren	ort to:	Ph	11	Pc	ler s	0 1							Pho	ne #:	 	508	· 8:	2 4-	7 11	a	
Tour ton						1.1			PL							: .		-					50S .					
	T . 15 . 15	formation - Identif	fication	Date	9-14-05		Analy Requ	/sis lest															Seisulate			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1,000	di /
atrix Code: W=drinking water WW= W=groundwater SL=sl	ludge		=Oil Other	·			/				260.5	//	7	ر در مرد	+/	ive,	/ v/			Nat 1	Soll of Soll o	naher	St St Trail	No of the last of	A SOUTH	Source State of the state of th	S' /	Sorri Cottle
Phoenix Sample #		mer Sample	Sample Matrix		Time Sampled	/	15/1	(3)/C	WY.				112	1/4	5°×			/6		53NG	SON SE	14/G	PLIDE.	25 X	,	N. S.	FORT PAST	Sorti Bottle
		GWTS . I		<del></del>		X	7	7	X	X	7	7	7	+		1.					2	2	1					
		GWTS E		1	1335	ン	<b>\( \lambda_{\epsilon} \)</b>	X	7	4	7	+	4	1						14	2	a	1					
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mments, Special Requiren  Petcho  Day 3 Res		/	<del></del>		por 1				V. F.			* Sı		Stand Other	lard (	-				/lobili Prote∈ Vol.	ty					S-1 S-2 S-3	Certific	cation
Day 3 Res	amp	le		Óul	4 1	<i>J</i> (1	r) 'S	· `	~      '	10	2							gan, de State vivo	-,	á.								25 V (0. V .



Monday, September 19, 2005

Batq 448 Broadway

Taunton MA 02780

Attention: Mr Phil Peterson

Sample ID#: AG69034-69037

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

**Laboratory Director** 

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

NY Lab Registration #11301

RI Lab Registration #63

NH Lab Registration #213693-A,B

ME Lab Registration #CT-007

NJ Lab Registration #CT-003

PA Lab Registration #68-03530





## **Analysis Report**

**September 19, 2005** 

FOR:

Attn: Mr Phil Peterson **BATG** Environmental Inc.

448 Broadway

Taunton, MA 02780

<u>Sample</u>	Inform	<u>nation</u>

WATER

**Custody Information** 

**Time** 

Matrix:

**Location Code: BATGTAUN** 

Collected by:

09/14/05 09/15/05

Date

13:30

Rush Request: RUSH24HR

Received by: Analyzed by:

see "By" below

14:45

P.O.#:

05-110

SDG I.D.: GAG69034

## **Laboratory Data**

Phoenix I.D.: AG69034

Client ID:

**B/W RPS GWTS-I** 

Parameter (1)	Result	RL	Units	Date	Time By	Reference
MADEP MCP 8270 Certification	Completed		The state of the s	09/16/05	JH .	MCP
Semi-Volatile Extraction	Completed	. ∮. a comment	All Marie Constitution	09/15/05		SW3510/3520
Polynuclear Aromatic HC		में प्रमुख्यालय । इ.स.च्याच्या इ.स.च्याच्या इ.स.च्या	The state of the s			(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
2-Methylnaphthalene	ND	10	ug/L	09/16/05	JH	SW 8270
Acenaphthene	ND	10	ug/L	09/16/05	JH	SW 8270
Acenaphthylene	ND	10	ug/L	09/16/05	ĴΉ	SW 8270
Anthracene	ND	10	ug/L	09/16/05	JH	SW 8270
Benz(a)anthracene	ND	10	$\mathbf{ug}/\mathbf{L}$	09/16/05	JH	SW 8270
Benzo(a)pyrene	ND	10	ug/L	09/16/05	JH	SW 8270
Benzo(b)fluoranthene	ND	10	ug/L	09/16/05	JH	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	09/16/05	$\mathbf{JH}$	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	09/16/05	JН	SW 8270
Chrysene	ND **	10	ug/L	09/16/05	JH	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	09/16/05	JH	SW 8270
Fluoranthene	ND	10	√ug/L	09/16/05	JH	SW 8270
Fluorene	ND	10	ug/L	09/16/05	, JH	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	09/16/05	JH	SW 8270
Naphthalene	ND	10	ug/L	09/16/05	JН	SW 8270
Phenanthrene	ND	10	ug/L	09/16/05	JH	SW 8270
Pyrene	ND	10	ug/L	09/16/05	JH	SW 8270
QA/QC Surrogates	.4 -	•				
% 2-Fluorobiphenyl	43		<b>%</b>	09/16/05	<b>л</b> н	SW 8270
% Nitrobenzene-d5	50		%	09/16/05	JH	SW 8270
% Terphenyl-d14	26	1.5	%	09/16/05	ј јн	SW 8270

Parameter

-36

ħε,

Result

 $\mathbf{RL}$ 

Units

Date

Time By

Phoenix I.D.: AG69034

Reference

Comments:

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

September 19, 2005

11.





## **Certification Report**

September 19, 2005

SDG I.D.: GAG69034

#### DEP MCP 8270 Certification

Were all QA/QC procedures required (as specified in WSC-CAM Table II B-1) followed including the requirement to note and discuss n a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### 3270 Narration:

The client requested PAH compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds, CCCs, SPCCs and surrogates.

attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Printed Name

Johanna Harrington

Position:

Chemist

Date:

 $4t_0$ 

9/16/2005 1:52:00 PM





## QA/QC Report

**September 19, 2005** 

•	Q	A	$\mathbf{Q}$	<u>C</u>	$\mathbf{D}$	<u>at</u>	<u>a</u>	
٠.	2000	γ.	3,4 10.	or teacher	4.2.0	-		•

				750 D W	MS Dup	DDD
arameter	B	lank	LCS %	MS Rec %	Rec %	RPD
√QC Batch Sample No: A	AG69034 (AG69034, A	G69035)				
olynuclear Aromat	tic HC					
Methylnaphthalene		ND		95	100	5.1
enaphthene		ND		97	96	1.0
enaphthylene		ND		92	92	0.0
ıthracene	<u>.</u>	ND			*2* 1	
nzo(a) anthracene		ND		106	114	7.3
nzo(a) pyrene		ND		127	134	<b>5.4</b>
enzo(b) fluoranthene		ND		120	127	5.7
nzo(g,h,i) perylene		ND		118	108	8.8
nzo(k) fluoranthene	en e	ND		130	140	7.4
ırysene		ND	and the second s	109	109	0.0
benzo(a,h) anthracene		ND :	Cross Micheller Groper German Talle Holl College		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
uoranthene	$dT = dT^{T}$ $dT^{T}$ $dT^{T}$	ND	ernegen er vivil State	106	111 1	4.6
uorene		ND		115	116	0.9
deno(1,2,3-cd) pyrene	,	ND		137	127	7.6
aphthalene		ND	•	89	95	6.5
henanthrene		ND		116	114	1.7
vrene	•	ND		104	110	5.6
· 2-Fluorobiphenyl		75		86	86	0.0
Nitrobenzene-d5		87		66	66	0.0
		89		103	103	0.0
Terphenyl-d14 Comment: A LCS and LC	C Dunlianta wara parfam		d of a matrix spike	and matrix spike duplic	ate.	**************************************
comment: A LCS and LC	o Dubitcate were perform	Ted ITPREC	ta or a matrix spine		<del></del>	

f there are any questions regarding this data, please call Phoenix Client Services at extension 200.

1S - Matrix Spike

**IS Dup - Matrix Spike Duplicate** 

**PD - Relative Percent Difference** 

CS - Laboratory Control Sample

Phyllis Shiller, Laboratory Director

<del></del>	MADEF	MCP Respo	onse Action Ar	nalytical Report	t Certificatio	n Form
Labor	atory Name: F	hoenix Environ	mental Laborator	ies, Inc. Proje	ct #:	
	t Location:		· · · · · · · · · · · · · · · · · · ·		EP RTN1:	
This Fo	orm provides certifi	cations for the follow	wing data set: [list La	aboratory Sample ID	Number(s)]	
AG690	34, AG69035					~
Sample	Matrices:	Groundwater	Soil/Sediment	Drinking Water	Other:	
MC	CP SW-846	☐ 8260B	☐ 8151A	□ 8330	☐ 6010B	☐ 7470A/1A
Me	thods Used	8270C	☐ 8081A	☐ VPH	<u></u> 6020	☐ 9014M2
	cified in MADEP	8082	☐ 8021B	☐ EPH		☐ 7196A
Analytic	ndium of cal Methods. all that apply)	2 M - SW-846 Mei 3 S - SW-846 Met	hods 7000 Series Li	Physiologically Availast individual method a	ind analyte	* [4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
				C is required for '		Certainty" status
A	Were all samp that described	les received by on the Chain-of	the laboratory in -Custody docum	a condition consist entation for the date	stent with ata set?	☑Yes □ No
В	included in this discuss in a na standards or g	report followed arrative QC data uidelines?	l, including the re that did not mee	pecified analytical equirement to note et appropriate perf	e and formance	Refer to attached MCP Certification (s).
С	"Presumptive the MADEP do	Certainty", as de ocument CAM V	escribed in Section II A, "Quality Ass	meet all the requion 2.0 (a), (b), (c) surance and Qualif Analytical Data"?	and (d) of ity Control	Refer to attached MCP Certification (s).
D	without signific	cant modification	ns (see Section 1	EPH Method cor 11.3 of respective	Methods)	Refer to attached MCP Certification (s).
	A respon	se to questions	E and F below is	required for "Pre	sumptive Cert	ainty" status
E	Were all QC p		ndards and reco	mmendations for	the specified	Refer to attached MCP Certification (s).
F	Were results method(s) rep		t compounds/ele	ements for the spe	ecified	☐ Yes ☐ No
				attached Environmen		
inau	irv of those re	sponsible for o	obtaining the in	enalties of perjur formation, the m f, accurate and c	aterial contai	upon my personal ined in this analytica
Auti	porized	Bushle			, il	ember 19, 2005
	ited Name: Ph	=			Laboratory Dir	· · · · · · · · · · · · · · · · · · ·
Prin	ited Name: Ka	thleen Cressia		Position:	QA/QC Office	[

CAM VII A, rev. 3.2





# Analysis Report October 03, 2005

FOR:

Attn: Mr Jesse Maggs

rakjak an jida kama

BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

Sample Inform	<u>iation</u>	Custody Inform	<u>mation</u>	<u>Date</u>	<u>Time</u>
Matrix:	WATER	Collected by:	JM	09/26/05	15:15
Location Code	: BATGTAUN	Received by:		09/27/05	15:45
Rush Request:	RUSH24HR	Analyzed by:	see "By" below	1. V	

P.O.#:

SDG I.D.: GAG71739

	<u>Laborat</u>	<u>ory L</u>	<u> Data</u>	Phoenix	I.D.: A	G71739
Client ID: B/W RPS GWT	S-092605-INF		3 - 1	Apple	1 .	
Parameter	Result	RL	Units	Date Time	Ву	Reference
Total Suspended Solids	370	5.0	mg/L	09/28/05	KL	SM2540D
Semi-Volatile Extraction	Completed	A Comment		09/27/05	L/M	SW3510/3520
Extraction of TPH MOD 8100	Completed			09/27/05	M	3550/5030
TPH by GC (Extractable F	Products)				jh.	
Aviation Fuel/Kerosene	ND	0.5	mg/L	09/28/05	JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	**	0.5	mg/L	09/28/05	JRB	8100Modified
Fuel Oil #4	ND	0.5	mg/L	09/28/05	JRB	8100Modified
Fuel Oil #6	ND	0.5	mg/L	09/28/05	JRB	8100Modified
Motor Oil	ND	0.5	mg/L	09/28/05	JRB	8100Modified
Other Oil (Cutting & Lubricating)	ND	0.5	mg/L	09/28/05	JRB	8100Modified
Unidentified	21	0.5	mg/L	09/28/05	JRB	8100Modified
OA/OC Surrogates % n-Pentacosane	Interference		%	09/28/05	JRB	8100Modified
Aromatic Vols. plus Naph	<u>thalene</u>			MA A		Pos
1,2-Dichlorobenzene	ND	1.0	ug/L	09/28/05	RM	∫SW 8260
1,3-Dichlorobenzene	ND	1.0	ug/L	09/28/05	RM	SW 8260
1,4-Dichlorobenzene	ND	1.0	ug/L	09/28/05	RM	SW 8260
Benzene	ND	1.0	ug/L	09/28/05	RM	<sup>#</sup> SW 8260
Chlorobenzene	ND	1.0	ug/L	09/28/05	RM	SW 8260
Ethyl Benzene	ND	1.0	ug/L	09/28/05	RM	SW 8260
Naphthalene	ND	1.0	ug/L	09/28/05	RM	SW 8260
o-Xylene	ND	1.0	ug/L	09/28/05	RM	SW 8260
p&m-Xylene	ND	1.0	ug/L	09/28/05	RM	SW 8260

Client ID: B/W RPS GWTS-09	2605-INF		the state of		Phoenix I.D.: AG71739				
Parameter	Result	RL	Units	Date Time	e By	Reference			
Toluene	ND	1.0	ug/L	09/28/05	RM	SW 8260			
OA/OC Surrogates % BFB (SURROGATE RECOVERY)	91		%	09/28/05	RM	SW 8260			
Polynuclear Aromatic HC	en e								
2-Methylnaphthalene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Acenaphthene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Acenaphthylene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Anthracene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Benz(a)anthracene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Benzo(a)pyrene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Benzo(b)fluoranthene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Benzo(ghi)perylene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Benzo(k)fluoranthene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Chrysene	ND ·	11	ug/L	09/28/05	_ KCA	SW 8270			
Dibenz(a,h)anthracene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Fluoranthene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Fluorene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Indeno(1,2,3-cd)pyrene	ND	. 11	ug/L	09/28/05	KCA	SW 8270			
Naphthalene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Phenanthrene	ND	11	ug/L	09/28/05	KCA	SW 8270			
Pyrene	ND		ug/L	09/28/05	KCA	SW 8270			
OA/OC Surrogates				en en et en steaten et en teten en en e	Tall				
% 2-Fluorobiphenyl	59	*	%	09/28/05	KCA	SW 8270			
% Nitrobenzene-d5	64		%	09/28/05	KCA	SW 8270			
% Terphenyl-d14	14*		%	09/28/03	KCA	SW 8270			

Comments:

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

October 03, 2005

<sup>\*\*</sup>Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles diesel fuel / fuel #2.

 $<sup>\</sup>hbox{* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC}$ criteria. No further action was necessary.



## CHAIN OF CUSTODY RECORD

Data Delivery (check one)

587 East Middle Turnpike, P.O. Box 370. Manchester. CT 06040 Email: service@phoenixlabs.com Fax (860) 645-0823

$P\Pi UL$		A STATE	914,			Ema	il: ser									J623					<u>.                                    </u>		, .			
Environmenta	l Laborator	ies, In	С.							vice											<u>For</u>		\$	140.71 110.44	:	• "
Customer: BATG	Environme	~ t=1.	3727				Projec	t: _£	40	<u> </u>				-							at FuC = #:	,				
Address: 418 C	road way						Projec Repor Invoic	t to: _		1	<del></del> -	<u>:</u>		<u>.</u>						Phone						
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	B/W RPS.	B1	5	9-1-05	0955	X	X										-		1				<u> </u>			
2 (010554	B/W RPS.	Ba	5	9-1-05	1000	$\geq$	X				-				_			1					-			
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Relinquish	ed by:		ACCE	Died by.	6		25		2, ; <	10				] 1 Da				$\vdash$		. Crite	eria ection				Ħ	GW-2
RTI			100			$\Delta$	25							2 Da 3 Da						Mobil						GW-3
		2707	40	Inda	<u>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>	<u> </u>	<u> </u>	<del>-  '-</del>	. 1,00			1		] Stan					GB	Mobil	ity				[]	S-1 5-2
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Comments, Special Requi	rements of negula		ι									_			<del></del>					Vol.					, [, ]	MOP GA
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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Fax (860) 645-0823 Tel. (860) 645-1102

**Analysis Report** 

September 13, 2005

FOR:

Attn: Mr. Phil Peterson

**BATG Environmental Inc.** 

448 Broadway

Taunton, MA 02780

Sample Information

SOIL

**Location Code: BATGTAUN** Rush Request: RUSH#

P.O.#:

Matrix:

05-110

**Custody Information** 

Collected by:

Received by:

Analyzed by:

LB

see "By" below

Date

09/01/05

09/02/05

10:00 16:30

Time

**SDG I.D.: GAG66553** 

**Laboratory Data** 

Phoenix I.D.: AG66554

Client ID:

BW/RPS B/W RPS-B2

Parameter	Result	$\mathbf{RL}$	Units	Date '	Time	Ву	Reference
Percent Solid	79		%	09/06/05		O/E	E160.3
MADEP MCP EPH Certification	Completed			09/07/05		JH	MCP
MADEP MCP VPH Certification	Completed			09/13/05		AS	MCP
EPH Extraction	Completed			09/02/05		S/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/07/05		JН	<b>MAEPH98-1</b>
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/05/05		oz	VPH98-1

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director





## QA/QC Report

September 13, 2005

1	•	<u>ب</u>	$\sim$	-	
	Λ.	/# <b>h</b>	4 '	11	ata
	-	w	• ,		71.7

**SDG I.D.: GAG66553 MS Dup** 

Parameter	Blank	LCS %	MS Rec %	Rec %	RPD
QA/QC Batch Sample No: AG63639 (A	G66553, AG66554)				
MA-EPH					
Acenapthene	ND	64	62	70	12.1
Anthracene	ND	80	64	78	19.7
Chrysene	ND	82	58	72	21.5
Eicosane (C20)	ND	59	45	55	20.0
Naphthalene	ND				
Nonadecane (C19)	ND	59	45	55	20.0
Octacosane (C28)	ND	59	45	55	20.0
Pyrene	ND	80	69	82	17.2
Tetradecane (C14)	ND	51	38	47	21.2
% 2-Bromonapthalene	<b>52</b>	40	48	32	40.0
% Chlorooctadecane	88	66	51	63	21.1
% o-terphenyl	118	90	73	86	16.4
%2 Fluorobiphenyl	116	94	114	47	83.2
QA/QC Batch Sample No: AG67633 (A	AG66553, AG66554	<b>(</b> )			
MA-VPH					
1,2,4-trimethylbenzene	ND	97	118	113	4.3
2-methylpentane	ND	88	99	94	5.2
Benzene	ND	95	69	66	4.4
Ethylbenzene	ND	106	112	105	6.5
Iso-octane	ND				
m&p-xylene	ND	98	110	98	11.5
n-nonane (C9)	ND	134	152	147	3.3
n-pentane (C5)	ND	63	91	119	26.7
naphthalene	ND	104	89	90	1.1
o-xylene	ND	98	93	90	3.3
tert-butylmethyl ether (MTBE)	ND	108			
Toluene	ND	96	81	78	3.8
% 2,5-dibromotoluene	84%	98%	110%	96%	NC
,					

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

MS - Matrix Spike MS Dup - Matrix Spike Duplicate RPD - Relative Percent Difference LCS - Laboratory Control Sample

Phyllis shiller, Laboratory Director

## MADEP MCP Response Action Analytical Report Certification Form

Labo	ratory Name	: Pho	oenix Environ	mental Labora	atories, Inc.	Pro	ject #:	•	
Proje	ct Location	: BV	//RPS			MA	DEP RTN1:	* ***	
This F	orm provides c	ertificat	tions for the follo	owing data set: [lis	st Laboratory Sar	nple I	D Number(s)]		
AG66	5553, AG66554								
							····		
Sampl	le Matrices:	Gro	oundwater [	Soil/Sediment	Drinking W	ater	Other:		
	ICP SW-846		☐ 8260B	☐ 8151A	833	)	☐ 6010B	<u> </u>	70A/1A
IVI	ethods Use	<b>1</b>	8270C	☐ 8081A	☐ VPH	ł	□ 6020	<u> </u>	14M2
	ecified in MADE	Р	8082	☐ 8021B	☐ EPH	ł	7000S3	71	96A
Analyl	tical Methods. k all that apply)	2	M - SW-846 Me	acking Number (Rethod 9014 or MAI thods 7000 Series	DEP Physiologica		ailable Cyanide (PA	AC) Metho	
	An affirmat	ive re	sponse to qu	estions A, B, a	nd C is requir	ed fo	or "Presumptive	Certainty" st	atus
A				the laboratory f-Custody doc				☐ Yes	□ No
В	included in	this re a narra	eport followed ative QC data	required for the d, including the a that did not n	requirement	to no	ote and	Refer to attach Certification (s	
С	"Presumpti the MADE	ve Ce docu	ertainty", as d ument CAM \	ded in this repo escribed in Se /II A, "Quality / and Reporting	ction 2.0 (a), ( Assurance an	(b), (d d Qu	c) and (d) of ality Control	Refer to attach Certification (s	
D				Was the VPH ns (see Section				Refer to attach Certification (s	
;	A res	onse	to questions	E and F below	v is required fo	or "P	resumptive Cen	tainty" status	
E	Were all Q methods a			andards and re	commendatio	ns fo	or the specified	Refer to attack Certification (s	
F	Were resu method(s)			st compounds/	elements for	he s	pecified	☐ Yes	□No
	All n	egative	responses mus	st be addressed in	an attached Env	ironm	ental Laboratory ca	se narrative.	
inq	uiry of those	resp	onsible for o		information,	the	ury that, based material contai complete.		
	thorized inature:				Date	:	Tuesday, Sept	tember 13, 2	005
Pri	nted Name:	Phylli	s Shiller		Posit	ion:	Laboratory Dir	ector	
Pri	nted Name:	Kathl	een Cressia		Posit	ion:	QA/QC Office	r	

## MADEP MCP Response Action Analytical Report Cenification Form

Project #:

Laboratory Name: Phoenix Environmental Laboratories, Inc.

oject Location:				JEP KINT:	
	rtifications for the for	owing detailer (Brit)	Datino tropic and Ac 40	Seand Crack	
G66553, AG66554					
mple Matrices:	Groundwater	Soil/Sediment	Drinking Water	Other:	
MCP SW-846	8260B	8151A	, 8330	6010B	7470A/1A
Methods Used	☐ 8270C	☐ 8081A	☐ VPH	6020	9014M2
s specified in MADER	8082	8021B	☐ EPH	7000S3	7196A
ompendium of nalytical Methods. heck all that apply)	2 M - SW-846 M	racking Number (RT) ethod 9014 or MADE ethods 7000 Series	N), if known P Physiologically Ava List individual method	ailable Cyanide (PA I and analyte	AC) Metho
An affirmati	ve response to qu	iestions A, B, and	d C is required fo	r "Presumptive	Certainty" status
Were all sa that describ	mples received by ed on the Chain-	y the laboratory in of-Custody docur	n a condition cons mentation for the	sistent with data set?	☐ Yes ☐ No
included in discuss in a	VQC procedures this report followed narrative QC date or guidelines?	ed, including the r	equirement to no	te and	Refer to attached MCP Certification (s).
"Presumpting the MADER	nalytical data incluve Certainty", as or document CAM for the Acquisition	described in Sect VII A, "Quality As	tion 2.0 (a), (b), (d ssurance and Qua	c) and (d) of ality Control	Refer to attached MCP Certification (s).
VPH and E without sign	PH Methods only nificant modification	: Was the VPH ons (see Section	or EPH Method co 11.3 of respectiv	onducted e Methods)	Refer to attached MCP Certification (s).
A resp	oonse to question:	s E and F below	is required for "Pi	resumptive Cer	tainty" status
Were all Q methods a	C performance st chieved?	andards and rec	ommendations fo	r the specified	Refer to attached MCP Certification (s).
Were resumethod(s)	Its for all analyte-l reported?	ist compounds/e	lements for the sp	pecified	☐ Yes ☐ No
	egative responses mu				
inauiry of those	ed, attest under responsible for best of my know	obtaining the in	nformation, the p	material conta	l upon my personal ined in this analytica
Authorized Signature:			Date:	Tuesday, Sep	tember 13, 2005
Printed Name:	Phyllis Shiller		Position:	Laboratory Dir	rector
Printed Name:	Kathleen Cressia	ı	Position:	QA/QC Office	r
CAM VII A, rev	. 3.2				April 2004

Page 1 of 1

### SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:	
Containers	X Satisfactory Broken Leaking	
	Aqueous X N/A pH-2 pH-2 Comment	
Sampa	Soil or N.A. Samples not preserved in Methanol	jnd ∧
Preservatives	Sediment X Samples received in Methanol X covering soil holder string to	
	X Samples received in air tight container. Exceptions:	Ot
Temperature	Received on Ice Received at 4 degrees C X Other: See COC for	ווווי

### VPH ANALYTICAL RESULTS

VI II MANUEL LICIES I						 	
Method for Ranges: MADEP VPI	1 97-12	Client ID		BWRPS B-1	BWRPS B-2		
Method for Target Analytes: MADEP			Lab ID	AG66553	AG66554	 	
VPH Surrogate		Date C	ollected	09/01/05	09/01/05	 	<u> </u>
PID: 2,5-Dibromotoluene		Date F	Received	09/02/05	09/02/05	 	<u> </u>
FID: 2,5-Dibromotoluene	Ī	Date A	nalyzed	09/05/05	09/05/05	 	
,	ſ	Dilutio	n Factor	50	50	 	
	ĺ	% Moi	sture (soil)	22.0	21.0	 	<u> </u>
Range/Target Analyte	Eluting Range	RL	Units			 	<u> </u>
Unadjusted C5-C8 Aliphatics (*1)	N/A	1.25	mg/Kg	ND	ND		<u> </u>
Unadjusted C9-C12 Aliphatics (*1)	N/A	1.25	mg/Kg	ND	ND		<u> </u>
Benzene		250 ug/Kg		ND	ND		<u> </u>
Ethyl Benzene		250	ug/Kg	N D	ND	 	<u> </u>
MTBE		250	ug/Kg	ND	ND		↓_
Naphthalene		250	ug/Kg	ND	ND	 	<u> </u>
Toluene		250	ug/Kg	N D	ND	 	↓
m,p-Xylenes		500	ug/Kg	N D	ND	 	<u> </u>
o-Xylene		250	ug/Kg	ND	ND	 	1
C5-C8 Aliphatic Hydrocarbons *1,2	N/A	1.25	mg/Kg	ND	N D	 	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$
C9-C12 Aliphatic Hydrocarbons *1,3	N/A	1.25	mg/Kg	ND	ND	 	↓
C9-C10 Aromatic Hydrocarbons *1	N/A	0.25	mg/Kg	ND	ND	 	┴
PID % Surrogate Recovery			N/A	83	75		1
FID % Surrogate Recovery	1		N/A	80	105		
Surrogate Acceptance Range			N/A	70-130%	70-130%	 	

<sup>\*1</sup> Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

CERT	$\mathbf{IFI}$	CAI	IOI	
------	----------------	-----	-----	--

Printed Name: ASHRAF SHEIKH	Date: 9/13/2005
Signature: Seth A.C.	Position: Chemist
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately re contained in this report is, to the best of my knowledge and belief, accurate and complete.	esponsible for obtaining the information, the mate
Were any significant modifications made to the VPH method, as specified in Section 11.3?	*Yes _xNo
Were all performance/acceptance standards for the required QA/QC procedures achieved?	_x_YesNo
Were all QA/QC procedures REQUIRED by the VPH method followed? _x_YesN	o

<sup>\*2</sup> C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

<sup>\*3</sup> C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range AND concentration of the C9-C10 Aromatic Hydrocarbons

### SAMPLE INFORMATION

Matrix	Aqueous <u>XX</u> Soi) Sediment Other:
Containers	XX Satisfactory Probes Leaking
Aqueous Preservatives	XX N A pH 2 pH 2 Comment:
Temperature	Received on Ice Received at 4 degrees C XX Other: See Chain Of Custody
Extraction Method	Water: 3510 Soil: 3545

## EPH ANALYTICAL RESULTS

				<del></del>			
1ethod for Ranges: MADEP EPH 98			E-W-RPS-B1	B W RPS-B2		<u> </u>	
1ethod for Target Analytes: MADEP-EPH-			AG66553	AG66554			
EPH Surrogate Standards		Collected	09/01/05	09/01/05			
Aromatic: o-terphenyl	Date	Received	09/02/05	09/02/05			
Aliphatic: 1-chlorooctadecane	Date	Extracted:	09/02/05	09/02/05		<u> </u>	ļ
EPH Fractionation Surrogates		Analyzed	09/06/05	09/06/05			
Aromatic: 2-Fluorobiphenyl		ion Factor	1	l			
Aromatic: 2-Bromonaphthalene		sture (soil)	22.0	21.0			
Range/Target Analyte	RL	Units					
Total TPH (*1)	3300	ug/Kg	9100	4300			ļ
Diesel PAH Target Analytes							<u> </u>
Naphthalene	330	ug/Kg	ND	ND			ļ
2-Methyl Naphthalene	330	ug/Kg	ND_	ND			
Phenanthrene	330	ug/Kg	ND	ND			
Acenaphthene	330	ug/Kg	ND	ND			<b>.</b>
Other PAH Target Analytes			, <u> </u>				
Acenapthylene	330	ug/Kg	ND	ND			
Anthracene	330	ug/Kg	ND _	ND			<u> </u>
Benzo(a)anthracene	330	ug/Kg	ND	ND			<u> </u>
Benzo(a)pyrene	330	ug/Kg	ND	ND	ļ		
Benzo(b)fluoranthene	330	ug/Kg	ND	ND			
Benzo(k)fluoranthene	330	ug/Kg	ND	ND			
Chrysene	330	ug/Kg	ND	ND			
Dibenzo(a,h)anthracene	330	ug/Kg	ND	ND	<u> </u>		
Fluoranthene	330	ug/Kg	ND	ND			
Fluorene	330	ug/Kg	680	590			
Indeno(1,2,3-cd)pyrene	330	ug/Kg	ND	ND			
Pyrene	330	ug/Kg	ND	ND			
C9-C18 Aliphatic Hydrocarbons *1	3300	ug/Kg	5800	ND			
C19-C36 Aliphatic Hydrocarbons *1	3300	ug/Kg	ND	ND			
C11-C22 Aromatic Hydrocarbons *1,2	3300		3300	4300			
Aliphatic Surrogate % Recovery			66	78	1		
Aromatic Surrogate % Recovery			100	120			
Sample Surrogate Acceptance Range			40-140	40-140			
Fractionation Surrogate % Recovery			98	110	<u> </u>		
Fractionation Surrogate % Recovery			55	53			
Fractionation Surr. Acceptance Range			40-140	40-140			
Fractionation Surr. Acceptance Range			40-140	40-140	<u> </u>	i	Щ.

<sup>\*1</sup> Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

	ATION	

Were all QA/QC procedures REQUIRED by the EPH method followere all performance/acceptance standards for the required QA/Q Were any significant modifications made to the EPH method, as specific and the second seco	C procedures achieved? <u>XX</u> YesNo
*If above question was checked yes, samples were run via GC/MS, otherwise run I I attest under the pains and penalties of perjury that, based upon my inquiry of th the material contained in this report is, to the best of my knowledge and belief, ac	by GC-FID. ose individuals immediately responsible for obtaining the information
Signature: Johanna Harrington	Position: Chemist  Date: 9/13/2005

<sup>\*2</sup> C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes eluting in that range.

PHOENIX	
Environmental Laboratori	es, Inc.

## CHAIN OF CUSTODY RECORD

Quite to the control of

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040 Email: service@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

	RATE	Environne	4-1. 7	T. (				Proje	ct:	$\mathbb{Z}/\mathbb{Z}$	∫≤	1									
i i	omer: <u>BATIG</u>	3 rondway						Repo	rt to:	M.	<u>1 P,</u>										
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	Ampler's gnature	nt Sample - Informat	tion - Identifi	cation	/ _ Date _	7.55	<i>A</i>   F	\naly Requ		//									k Kalan		
DW≃		V=wastewater S=s =sludge A=a		=Oil Other		<u> </u>			1/1		//					//		[		, i	
Item #	Phoenix Sample #	Customer Sa Identificat		Sample Matrix	Date Sampled	Time Sampled									//		/	\cs. \cs.		-	
1	<del></del>	B/WRPS B3	s coaf	5	9.7.05	1350	$ \lambda $	×						<del> </del>					l		
a		8/w RPS E.S		5	9.7,85	1319	\ \ \	入				_			<u> </u>				··		
3		Blu RPS S. S		S	97.05	1322	入	ょ							ļ . <u>.</u>	 					
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Com	ments. Special Requi	irements or Regulat	 tions:			1			_					Oth	<u>o</u> r				Seath of Seath		
																		· ·			



Tuesday, September 13, 2005

Batq 448 Broadwav

**Taunton** 

MA 02780

Attention: Mr Phil Peterson Sample ID#: AG67626-67628

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

**Phyllis Shiller** 

**Laboratory Director** 

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003
PA Lab Registration #68-03530





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Fax (860) 645-0823 Tel. (860) 645-1102

Analysis Report

September 13, 2005

FOR:

Auto: Mr. Phil Peterson

BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

Sample Information

**Location Code: BATGTAUN** 

**Custody Information** 

Date

**Time** 

Matrix:

SOIL

Collected by: Received by:

09/07/05 09/08/05 13:50

Rush Request: RUSH#

Analyzed by:

see "By" below

DL

17:00

P.O.#:

**Laboratory Data** 

SDG I.D.: GAG6762€

Phoenix I.D.: AG67626

Client ID:

**B/W RPS B/W RPS B3 CONF** 

Parameter	Result	RL	Units	Date	Time	By	Refere
Percent Solid	79		%	09/09/05		O/E	E160.3
MADEP MCP EPH Certification	Completed			09/12/05		JH	MCP
MADEP MCP VPH Certification	Completed			09/13/05		AS	MCP
EPH Extraction	Completed			09/08/05		O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05		$\mathbf{M}$	MAEPH!
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05		RM	VPH98-1

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director





585 Fast Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Fax (860) 645-0823 Tel, (860) 645-1102

Analysis Report September 13, 2005

FOR:

**Custody Information** 

Attn: Mr. Phil Peterson BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

<b>Sample Information</b>
---------------------------

SOIL

**Date** 

Time

Matrix:

Collected by:

09/07/05

13:19

**Location Code: BATGTAUN** 

Rush Request: RUSH#

Received by:

DL

17:00 09/08/05

P.O.#:

Analyzed by:

see "By" below

SDG I.D.: GAG67626

## **Laboratory Data**

Phoenix I.D.: AG67627

Client ID:

B/W RPS B/W RPS E.SW CONF

Parameter	Result	$\mathbf{RL}$	Units	Date	Time	Ву	Refere
Percent Solid	73		%	09/09/05		O/E	E160.3
EPH Extraction	Completed			09/08/05		O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05		JH	MAEPH!
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05		RM	<b>VPH98-</b> 1

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200

Phyllis Shiller, Laboratory Director





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

**Analysis** Report

September 13, 2005

FOR:

Attn: Mr. Phil Peterson

BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

**Sample Information** 

SOIL

**Location Code: BATGTAUN** 

Rush Request: RUSH#

Client ID:

**Custody Information** 

Collected by:

Received by: Analyzed by:

DL

see "By" below

13:22

**Time** 

09/07/05 17:00 09/08/05

Date

P.O.#:

Matrix:

**Laboratory Data** 

SDG I.D.: GAG67626 Phoenix I.D.: AG67628

B/W RPS B/W RPS S.SW CONF-1

Parameter	Result	RL	Units	Date	Time	Ву	Referei
Percent Solid	80		%	09/09/05		O/E	E160.3
EPH Extraction	Completed			09/08/05		O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05		ЛН	MAEPH9
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05		RM	VPH98-1

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director





96%

110%

Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 060 10 Tel. (860) 645-1102 Fax (860) 645-0823

## QA/QC Report

% 2,5-dibromotoluene

September 13, 2005	QA/Q	C Data	SDG 1.D.: GAG67626				
	<del></del>		MS Dup				
Parameter	Blank	LCS %	MS Rec %	Rec %	R		
QA/QC Batch Sample No: AG63639 (AG	67626, AG67627,	AG67628)					
MA-EPH							
Acenapthene	ND	64	62	70	1		
Anthracene	ND	80	64	78	1		
Chrysene	ND	82	58	72	2		
Eicosane (C20)	ND	59	45	55	2		
Naphthalene	ND						
Nonadecane (C19)	ND	59	45	55	2		
Octacosane (C28)	ND	59	45	55	2		
Pyrene	ND	80	69	82	)		
Tetradecane (C14)	ND	51	38	47	2		
% 2-Bromonapthalene	<b>52</b>	40	48	32	Ļ		
% Chlorooctadecane	88	66	51	63	2		
% o-terphenyl	118	90	73	86			
%2 Fluorobiphenyl	116	94	114	47	1		
QA/QC Batch Sample No: AG67633 (AG	367626, AG67627	, AG67628)					
MA-VPH							
1,2,4-trimethylbenzene	ND	97	118	113			
2-methylpentane	ND	88	99	94			
Benzene	ND	95	69	66			
Ethylbenzene	ND	106	112	105			
Iso-octane	ND						
m&p-xylene	ND	98	110	98			
n-nonane (C9)	ND	134	152	147			
n-pentane (C5)	ND	63	91	119			
naphthalene	ND	104	89	90			
o-xylene	ND	98	93	90			
tert-butylmethyl ether (MTBE)	ND	108					
Toluene	ND	96	81	78			

98%

84%

If there are any questions (1), and 1, and 2, a case can I noenix Client Services at excension 2001.

MS - Matrix Spike
MS Dup - Matrix Spike Duplie, to
RPD - Relative Percent Difference

LCS - Laboratory Control Sample

Phyllis Shiller, Laboratory Director





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

## Certification Report

September 13, 2005

SDG 1.D.: GAG67626

#### MADEP MCP EPH Certification

Were all QA/QC procedures required (as specified in BWSC-CAM Table IV A) followed including the requirement to note and d in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### EPH Narration:

A blank, matrix spike, matrix spike duplicate and lab control standard was performed for each batch. A sample duplicate was n performed. In cases where the matrix spike/matrix spike duplicate had matrix interference, the lab control standard passed.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and comple

**Printed Name** 

Johanna Harrington

Position:

Chemist

Date:

9/12/2005 10:41:20 AM

#### MADEP MCP VPH Certification

Were all QA/QC procedures required (as specified in BWSC-CAM Table IV A) followed including the requirement to note and c in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### **VPH Narration:**

The samples were analyzed twice. MTBE is reported from the first batch and all other compounds are reported from the second

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

**Printed Name** 

Ashraf Sheikh

Position:

Chemist

Date:

9/13/2005 1:05:00 AM

### SAMPLE INFORMATION

Matrix	Aqueous XX Soil Sediment Other:
Containers	XX Satisfactory Broken Leaking
Aqueous Preservatives	XX N.A. pH-2 pH>2 Commeat:
l'emperature	Received on Ice Received at 4 degrees C <u>XX</u> Other: See Chain Of Custody
Extraction Method	Water: 3510 Soil: 3545

## EPH ANALYTICAL RESULTS

, [ ] [ ] X, X/X [ , ] [ ] [ ] X, J X [ , ] X				<del>,</del>		
lethod for Ranges: MADEP EPH 98	- 1	Client ID	B W RPS B3	B W RPS E.SW	B W RPS S.S.W.	
fethod for Target Analytes: MADEP-EPH-	98-1	Lab ID	AG67626	AG67627	AG67628	
EPH Surrogate Standards		Collected	09/07/05	09/07/05	09.07:05	
Aromatic: o-terphenyl	Date	Received	09/08/05	09/08/05	09/08/05	
Aliphatic: 1-chlorooctadecane	Date	Extracted:	09/08/05	09/08/05	09/08/05	
EPH Fractionation Surrogates	Date	Analyzed	09/10/05	09.10/05	09 10:05	
Aromatic: 2-Fluorobiphenyl	Dilut	ion Factor	1	1	1	
Aromatic: 2-Bromonaphthalene	% Mois	sture (soil)	21.0	27.0	20.0	
Range/Target Analyte	RL	Units				
Total TPH (*1)	3300	ug/Kg	ND	ND	ND	
Diesel PAH Target Analytes						
Naphthalene	330	ug/Kg	ND	ND	ND	
2-Methyl Naphthalene	330	ug/Kg	ND	ND	ND	
Phenanthrene	330	ug/Kg	ND	ND	ND	
Acenaphthene	330	ug/Kg	ND	ND	ND	
Other PAH Target Analytes					<u> </u>	
Acenapthylene	330	ug/Kg	ND	ND	ND	
Anthracene	330	ug/Kg	ND	ND	ND	
Benzo(a)anthracene	330	ug/Kg	ND	ND	ND	
Benzo(a)pyrene	330	ug/Kg	ND	ND	ND	
Benzo(b)fluoranthene	330	ug/Kg	ND	ND	ND	
Benzo(k)fluoranthene	330	ug/Kg	ND	ND	ND	
Chrysene	330	ug/Kg	ND	ND	ND	
Dibenzo(a,h)anthracene	330	ug/Kg	ND	ND	ND	
Fluoranthene	330	ug/Kg	ND	ND	ND	
Fluorene	330	ug/Kg	330	420	350	
Indeno(1,2,3-cd)pyrene	330	ug/Kg	ND	ND	ND	
Pyrene	330	ug/Kg	ND	ND	ND	
C9-C18 Aliphatic Hydrocarbons *1	3300	ug/Kg	ND	ND	ND	
C19-C36 Aliphatic Hydrocarbons *1	3300	ug/Kg	ND	ND	ND	
C11-C22 Aromatic Hydrocarbons *1,2	3300		ND	ND	ND	
Aliphatic Surrogate % Recovery			65	67	45	
Aromatic Surrogate % Recovery		<del>                                     </del>	130	120	120	
Sample Surrogate Acceptance Range		1 "	40-140	40-140	40-140	
Fractionation Surrogate % Recovery	1		110	110	72	
Fractionation Surrogate % Recovery			57	63	60	
Fractionation Surr. Acceptance Range			40-140	40-140	40-140	

*1 Hydrocarbon range data exclude concentra	itions of any surrogate(s) and/or internal standards elu	ting in that range.
*2 C11-C22 Aromatic Hydrocarbons exclude	the concentration of Target PAH Analytes eluting in	that range.
CERTIFICATION		
Were all performance/acceptance stan Were any significant modifications ma *If above question was checked yes, samples w I attest under the pains and penalties of perjur, the material contained in this report is, to the	y th <mark>at, based upon my inquiry of those</mark> individuals im best o <mark>f my knowledge and belief, accurate</mark> and comple	chieved? <u>XX</u> YesNo fon 11.3?*Yes <u>XX</u> No mediately responsible for obtaining the information.
Signature:	Steam Hawington	Position: Chemist
Printed Name:	ohanna Harrington	Date: 9/12/05

#### SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:	
Containers	X Satisfactory Broken Leaking	
	Aqueous X N A pH 2 pH 2 Comment:	
Sample	Soil or N.A. Sampies not preserved in Methanol	ml M
Preservatives	Sediment X Samples received in Methanol X covering soil not covering so	ál X 1
	X Samples received in air tight container. Exceptions:	OR
Temperature	Received on Ice Received at 4 degrees C X Other: See COC	form

#### **VPH ANALYTICAL RESULTS**

Method for Ranges: MADEP VPH 97-12			Client ID	RPS B3 CONF	RPS E.SW CONF	PS S SW. CONF		
Method for Target Analytes: MADEI		Lab ID		AG67626	AG67627	AG67628		
VPH Surrogate		Date C	Collected	09/08/05	09/08/05	09/08/05		
PID: 2,5-Dibromotoluene		Date I	Received	09/08/05	09/08/05	09/08/05		
FID: 2,5-Dibromotoluene		Date A	Analyzed	09/09/05	09/09/05	09/09/05		
		Dilutio	n Factor	50	50	50		
		% Moi	isture (soil)	21.0	27.0	20.0		
Range/Target Analyte	Eluting Range	RL	Units					
Unadjusted C5-C8 Aliphatics (*1)	N/A	1.25	mg/Kg	ΝD	N D	ND		
Unadjusted C9-C12 Aliphatics (*1)	N/A	1.25	mg/Kg	109.0	ND	ND		
Benzene		250	ug/Kg	ND	ND	ND		
Ethyl Benzene		250	ug/Kg	ND	ND	ND		
MTBE		250	ug/Kg	ND	ND	ND		
Naphthalene		250	ug/Kg	ND	ND	ND		
Toluene		250	ug/Kg	N D	N D	ND		
m,p-Xylenes		500	ug/Kg	ND	ND	ND		
o-Xylene		250	ug/Kg	ND	ND	ND		
C5-C8 Aliphatic Hydrocarbons *1,2	N/A	1.25	mg/Kg	ND	ND	ND		
C9-C12 Aliphatic Hydrocarbons *1,3	N/A	1.25	mg/Kg	99.0	ND	ND		
C9-C10 Aromatic Hydrocarbons *1	N/A	0.25	mg/Kg	39.0	ND	ND		
PID % Surrogate Recovery			N/A	74	95	81		
FID % Surrogate Recovery			N/A	100	84	72		
Surrogate Acceptance Range			N/A	70-130%	70-130%	70-130%	70-130%	70

<sup>\*1</sup> Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

1	D	TI	E	CA	TI	N	N	J
ч								

CERTIFICATION	
Were all QA/QC procedures REQUIRED by the VPH method followed? _x_Yes _	No
Were all performance/acceptance standards for the required QA/QC procedures achieve	ed? _xYesNo
Were any significant modifications made to the VPH method, as specified in Section 13	1.3?*Yes _xNo
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediate contained in this report is, to the best of my knowledge and belief, accurate and complete.	ely responsible for obtaining the information, the mate
Signature: <u></u> <b>Earl</b> A.C.	Position: Chemist
Printed Name: ASHRAF SHEIKH	Date: 9/13/2005

<sup>\*2</sup> C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

<sup>\*3</sup> C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range AND concentration of the C9-C10 Aromatic Hydrocarbons

## TO DEF MCP Response Action Analytical Report Certification Form.

Project #:

Laboratory Name: Phoenix Environmental Laboratories, Inc.

1.15		: B/W RPS entifications for the followage AG67628	owing data set -{list L		DEP RTN1:  ) Number(s)	
	e Matrices:	Groundwater	Soil/Sediment	Drinking Water	Other:	
M	CP SW-846	[_] 8260B	8151A	8330	6010B	7470A/1A
M	ethods Use	d	□ 8081A		<u> </u>	9014M2
	ecified in MADE		☐ 8021B		7000S3	☐ 7196A
nalyt	endium of ical Methods.  ( all that apply)	2 M - SW-846 M	racking Number (RTN ethod 9014 or MADE ethods 7000 Series L	Physiologically Ava		AC) Metho
	An affirmat	ive response to qu	estions A, B, and	C is required for	r "Presumptive	Certainty" status
À	Were all sa that describ	amples received by sed on the Chain-o	the laboratory in of-Custody docum	a condition cons entation for the	sistent with data set?	ŻYes □ No
3	included in discuss in	A/QC procedures this report followe a narrative QC dat or guidelines?	d, including the re	equirement to no	te and	Refer to attached MCP Certification (s).
<b>D</b>	"Presumpt the MADE	nalytical data incluive Certainty", as one of the CAM for the Acquisition	lescribed in Secti VII A, "Quality As	on 2.0 (a), (b), (c surance and Qua	c) and (d) of ality Control	Refer to attached MCP Certification (s).
D		PH Methods only: inificant modification				Refer to attached MCP Certification (s).
	A res	ponse to questions	s E and F below is	s required for "Pr	esumptive Cen	tainty" status
E	Were all C methods a	C performance stachieved?	andards and reco	mmendations fo	r the specified	Refer to attached MCP Certification (s).
F	Were resumethod(s)	ilts for all analyte-l reported?	ist compounds/el	ements for the sp	pecified	☑Yes ☐ No
		negative responses mu				
inq	uiry of those	ned, attest under e responsible for e best of my knov	obtaining the in	formation, the r	naterial conta	upon my personal ined in this analytica
	thorized inature:	ga Shik		Date:	Tuesday, Sept	tember 13, 2005
Pri	nted Name:	Phyllis Shiller		Position:	Laboratory Dir	rector
		Kathleen Cressia		Position:	QA/QC Office	r
	AM VII A, rev	ı. 3.2	-			April 2004

PHOENIX **
The second of Laboratories Inc

### **CHAIN OF CUSTODY RECORD**

	CHAIN OF CUSTODY RECORD	Data Delivery (check one)
PHOENIX	587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040 Email: service@phoenixlabs.com Fax (860) 645-0823	
Environmental Laboratories, Inc.	Client Services (860) 645-8726	
Customer: BATG ENU Address: Mys Broadway Tamtra MA 0278)	Project: 15/W // SA Projec	Maying 1 Stephen Topy of
Sampler's Signature  Client Sample - Information - Identification  Date	Analysis Request	
Matrix Code:  DW=drinking water		
Phoenix Customer Sample Sample Date Sample # Identification Matrix Sampled S	Time Sampled	
11,71,751 Blu RPS By conf. 5 9.8.05	1001 7 7	
2 1071030 Blu RPS BS conf. 5 9.8.05	110 +	
3 (07(63) 6/WRPS S.SW 5 9.8.05)	004	<u></u>
Conf2		-1
		and the second s
		in the state of th
Relinquished by: Accepted by:	Jane.	rements for CT <sup>max</sup> Region in
M.L WOO		<ul> <li>Onto a</li> <li>Michael att</li> </ul>
Korrondo	\ \( \frac{1}{6} \) \( \frac{5}{7} \) \( \frac{1}{6} \) \( \frac{1}{7} \) \( \frac{1} \) \( \frac{1}{7} \) \( \frac{1}{7	Magazini Magazini Magazini
Comments, Special Requirements or Regulations:	Othes	

1990年<u>年8日 - 1997年 - 199</u>1年 - 1990年 - 1990年 - 1991年 -

111(UL) (1.)

Tuesday, September 13, 2005

Batq

448 Broadway

**Taunton** 

MA 02780

Attention: Mr Phil Peterson

Sample ID#: AG67629-67631

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

**Phyllis Shiller** 

**Laboratory Director** 

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

NY Lab Registration #11301

RI Lab Registration #63

NH Lab Registration #213693-A,B

ME Lab Registration #CT-007

NJ Lab Registration #CT-003

PA Lab Registration #68-03530





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 13, 2005

FOR:

Attn: Mr. Phil Peterson

BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

Sample Information

SOIL

**Custody Information** 

Date

Time

Matrix:

Collected by: Received by:

09/08/05 09/08/05 11:01

**Location Code: BATGTAUN** 

Rush Request: RUSH#

Analyzed by:

DLsee "By" below 17:00

P.O.#:

05-110

SDG I.D.: GAG67629

**Laboratory Data** 

Phoenix I.D.: AG67630

Client ID:

B/W RPS B/W RPS B5 CONF

Parameter	Result	RL	Units	Date	Time	$\mathbf{B}\mathbf{y}$	Refere
Percent Solid	80		%	09/09/05	·	O/E	E160.3
EPH Extraction	Completed			09/08/05		O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05		Ж	MAEPH:
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05		RM	<b>VPH98</b> -1

#### **Comments:**

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200

Phyllis Shiller, Laboratory Director





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

## **Analysis Report**

September 13, 2005

FOR:

**Custody Information** 

Attn: Mr. Phil Peterson

BATG Environmental Inc. 448 Broadway

Taunton, MA 02780

Sample	<u>Information</u>

Matrix:

SOIL

Collected by:

DL

<u>Date</u> 09/08/05 09/08/05

10:04

Time

Location Code: BATGTAUN

Rush Request: RUSH#

Received by: Analyzed by:

see "By" below

17:00

P.O.#:

05-110

by below

SDG I.D.: GAG67629

## **Laboratory Data**

Phoenix I.D.: AG67631

Client ID:

B/W RPS B/W RPS S.SW CONF-2

Parameter	Result	$\mathbf{RL}$	Units	Date	Time	$\mathbf{B}\mathbf{y}$	Refere
Percent Solid	79		%	09/09/05		O/E	E160.3
EPH Extraction	Completed			09/08/05		O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05		JH	MAEPH9
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05		RM	<b>VPH98-1</b>

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

## QA/QC Report

September 13, 2005

$\Lambda$		Data
	/50/5	11414

SDG 1.D.: GAG67629

^	<u> </u>	<u>C Duta</u>		MS Dup	m
Parameter	Blank	LCS %	MS Rec %	Rec %	<b>R</b> .
QA/QC Batch Sample No: AG63639 (A	G67629, AG67630,	AG67631)			
MA-EPH					
Acenapthene	ND	64	62	70	1
Anthracene	ND	80	64	78	1
Chrysene	ND	82	58	72	2
Eicosane (C20)	ND	59	45	55	2
Naphthalene	ND				
Nonadecane (C19)	ND	59	45	55	2
Octacosane (C28)	ND	59	45	55	2
Pyrene	ND	80	69	82	1
Tetradecane (C14)	ND	51	38	47	2
% 2-Bromonapthalene	52	40	48	32	4
% Chlorooctadecane	88	66	51	63	2
% o-terphenyl	118	90	73	86	3
%2 Fluorobiphenyl	116	94	114	47	8
QA/QC Batch Sample No: AG67633 (A	AG67629, AG67630	, AG67631)			
MA-VPH	•	•			
1,2,4-trimethylbenzene	ND	97	118	113	
2-methylpentane	ND	88	99	94	
Benzene	ND	95	69	66	
Ethylbenzene	ND	106	112	105	
Iso-octane	ND				
m&p-xylene	ND	98	110	98	
n-nonane (C9)	ND	134	152	147	
n-pentane (C5)	ND	63	91	119	:
naphthalene	ND	104	89	90	
o-xylene	ND	98	93	90	
tert-butylmethyl ether (MTBE)	ND	108			
Toluene	ND	96	81	78	
% 2,5-dibromotoluene	84%	98%	110%	96%	
,					

If there are any questions regarding the outst policy can Phoenix Client Services at extension 200.

MS - Matrix Spike MS Dup - Matrix Spike Duplicate RPD - Relative Percent Difference LCS - Laboratory Control Sample

Phyllis Shiller, Laboratory Director





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

## Certification Report

September 13, 2005

SDG I.D.: GAG67629

#### **MADEP MCP EPH Certification**

Were all QA/QC procedures required (as specified in BWSC-CAM Table IV A) followed including the requirement to note and di in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### EPH Narration:

A blank, matrix spike, matrix spike duplicate and lab control standard was performed for each batch. A sample duplicate was no performed. In cases where the matrix spike/matrix spike duplicate had matrix interference, the lab control standard passed.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and comple

**Printed Name** 

Johanna Harrington

Position:

Chemist

Date:

9/12/2005 10:43:13 AM

#### **MADEP MCP VPH Certification**

Were all QA/QC procedures required (as specified in BWSC-CAM Table IV A) followed including the requirement to note and  $\epsilon$  in a narrative QC data that did not meet appropriate performance standards or guidelines? Yes, with the following exceptions.

#### VPH Narration:

The samples were analyzed twice. MTBE is reported from the first batch and all other compounds are reported from the second

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

**Printed Name** 

Ashraf Sheikh

Position:

Chemist

Date:

9/13/2005 1:06:00 AM

### DEP REQUIRED VPH DATA REPORTING FORMAT/INFORMATION

#### SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:	
Containers	X Satisfactory Broken Leaking	
	Aqueous X N/A pH<2 pH>2 Comment:	
Sample	Soil orN/ASamples not preserved in Methanol	ml 55s
Preservatives	Sediment _X_Samples received in Methanol _X_covering soilnot covering soil	N. 1 -
	_X_Samples received in air tight container. Exceptions:	On
Temperature	Received on Ice Received at 4 degrees C X Other: See COC form	

#### VPH ANALYTICAL RESULTS

VIII ANADI IICALI	CESCETS							
Method for Ranges: MADEP VPI	Client ID		RPS S.B4 CONF	RPS B5 CONF.	RPS S SW			
Method for Target Analytes: MADEP-VPH-98-1			Lab ID	AG67629	AG67630	AG67631		
VPH Surrogate		Date C	Collected	09/08/05	09/08/05	09/08/05		
PID: 2,5-Dibromotoluene		Date I	Received	09/08/05	09/08/05	09/08/05		
FID: 2,5-Dibromotoluene	[	Date A	Analyzed	09/09/05	09/09/05	09/09/05		
		Dilutio	n Factor	50	50	50	ļ	
		% Moi	isture (soil)	22.0	20.0	21.0		
Range/Target Analyte	Eluting Range	RL	Units			.ND 69	153/05	
Unadjusted C5-C8 Aliphatics (*1)	N/A	1.25	mg/Kg	ND	ND	ND		
Unadjusted C9-C12 Aliphatics (*1)	N/A	1.25	mg/Kg	ND	ND	ND		
Benzene		250	ug/Kg	ND	ND	ND		
Ethyl Benzene		250	ug/Kg	ND	ND	ND		
MTBE		250	ug/Kg	ND	ND	ND		
Naphthalene		250	ug/Kg	ND	ND	ND		
Toluene		250	ug/Kg	ND	ND	ND		
m,p-Xylenes		500	ug/Kg	ND	ND	ND		
o-Xylene		250	ug/Kg	ND	ND	ND		
C5-C8 Aliphatic Hydrocarbons *1,2	N/A	1.25	mg/Kg	N D	ND	ND		
C9-C12 Aliphatic Hydrocarbons *1,3	N/A	1.25	mg/Kg	ND	ND	ND		
C9-C10 Aromatic Hydrocarbons *1	N/A	0.25	mg/Kg	ND	ND	ND		
PID % Surrogate Recovery			N/A	85	75	71		
FID % Surrogate Recovery			N/A	75	84	76		
Surrogate Acceptance Range	1		N/A	70-130%	70-130%	70-130%	70-130%	7C

<sup>\*1</sup> Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

CERTIFICATION	
Were all QA/QC procedures REQUIRED by the VPH method followed? _x_YesNo	
Were all performance/acceptance standards for the required QA/QC procedures achieved? _x	YesNo
Were any significant modifications made to the VPH method, as specified in Section 11.3?	_*Yes _xNo
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately respor contained in this report is, to the best of my knowledge and belief, accurate and complete.	nsible for obtaining the information, the mater
Signature:	Position: Chemist
Printed Name: ASHRAF SHEIKH	Date: 9/13/2005

<sup>\*2</sup> C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

<sup>\*3</sup> C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range AND concentration of the C9-C10 Aromatic Hydrocarbons

#### DEP REQUIRED EPH DATA REPORTES GLORAGE AS FOR MATION

#### SAMPLE INFORMATION

Matrix	Aqueous <u>XX</u> Soil Sediment Other:
Containers	XX Satisfactory Broken Leaking
Aqueous Preservatives	XX N/A pH<2 pH>2 Comment:
Temperature	Received on Ice Received at 4 degrees C XX Other: See Chain Of Custody
Extraction Method	Water: 3510 Soil: 3545

#### EPH ANALYTICAL RESULTS

Method for Ranges: MADEP EPH 98-1		Client ID	B.W RPS B4	B W RPS B5	B W RPS S.SW		
Method for Target Analytes: MADEP-EPH		Lab ID	AG67629	AG67630	AG67631		
EPH Surrogate Standards	Date	Collected	09/08/05	09/08/05	09/08/05		
Aromatic: o-terphenyl	Date	Received	09/08/05	09/08/05	09/08/05		
Aliphatic: 1-chlorooctadecane	Date 1	Extracted:	09/08/05	09/08/05	09/08/05		
EPH Fractionation Surrogates	Date	Analyzed	09/10/05	09/10/05	09/10/05		
Aromatic: 2-Fluorobiphenyl	Dilut	ion Factor	1	1	1		
Aromatic: 2-Bromonaphthalene	% Mois	ture (soil)	22.0	20.0	21.0		
Range/Target Analyte	RL	Units					
Total TPH (*1)	3300	ug/Kg	ND	ND	ND		
Diesel PAH Target Analytes							
Naphthalene	330	ug/Kg	ND	ND	ND		_
2-Methyl Naphthalene	330	ug/Kg	ND	ND	ND		
Phenanthrene	330	ug/Kg	ND	ND	ND		<u> </u>
Acenaphthene	330	ug/Kg	ND	ND	ND		
Other PAH Target Analytes							
Acenapthylene	330	ug/Kg	ND	ND	ND		
Anthracene	330	ug/Kg	ND	ND	ND		
Benzo(a)anthracene	330	ug/Kg	ND	ND	ND		
Benzo(a)pyrene	330	ug/Kg	ND	ND	ND		
Benzo(b)fluoranthene	330	ug/K.g	ND	ND	ND		
Benzo(k)fluoranthene	330	ug/Kg	ND	ND	ND		
Chrysene	330	ug/Kg	ND	ND	ND		
Dibenzo(a,h)anthracene	330	ug/Kg	ND	ND	ND	_	
Fluoranthene	330	ug/Kg	ND	ND	ND		
Fluorene	330	ug/Kg	390	440	440		
Indeno(1,2,3-cd)pyrene	330	ug/Kg	ND	ND	ND		
Pyrene	330	ug/Kg	ND	ND	ND		
C9-C18 Aliphatic Hydrocarbons *1	3300	ug/Kg	ND	ND	ND	1	
C19-C36 Aliphatic Hydrocarbons *1	3300	ug/Kg	ND	ND	ND	1	
C11-C22 Aromatic Hydrocarbons *1,2	3300	ug/Kg	ND	ND	ND		
Aliphatic Surrogate % Recovery			64	67	63		
Aromatic Surrogate % Recovery	Ì		130	130	130		
Sample Surrogate Acceptance Range	1		40-140	40-140	40-140		
Fractionation Surrogate % Recovery			110	96	98		
Fractionation Surrogate % Recovery			65	60	64		
Fractionation Surr. Acceptance Range			40-140	40-140	40-140		

<sup>\*1</sup> Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

CEF	וידינ		$\sim \lambda^{r}$	ri.	ON
CDF	C I J	LPI	CA.	111	רוע

Were all QA/QC procedures REQUIRED	by the EPH method followed? XX YesNo
Were all performance/acceptance standard	s for the required QA/QC procedures achieved? XX YesNo
Were any significant modifications made t	o the EPH method, as specified in Section 11.3? *Yes *XX No
*If above question was checked yes, samples were ru	
I attest under the pains and penalties of perjury that	, based upon my inquiry of those individuals immediately responsible for obtaining the information,
the material contained in this report is, to the best o	
Signature:	. Homogen Position: Chemist
Printed Name: Johan	nna Harrington Date: 9/12/05

<sup>\*2</sup> C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes eluting in that range.





587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040 Tel. (860) 645-1102 Fax (860) 645-0823

## **Analysis Report**

**September 13, 2005** 

FOR:

Attn: Mr. Phil Peterson

BATG Environmental Inc.

448 Broadway

Taunton, MA 02780

Sample Information
--------------------

SOIL

**Custody Information** 

Date 09/08/05 **Time** 

Matrix: **Location Code: BATGTAUN** 

Collected by: Received by:

09/08/05

10:01

Rush Request: RUSH#

Analyzed by:

see "By" below

DL

17:00

P.O.#:

05-110

SDG I.D.: GAG67629

## **Laboratory Data**

Phoenix I.D.: AG67629

Client ID:

**B/W RPS B/W RPS B4 CONF** 

Parameter	Result	RL	Units	Date Ti	me By	Referer
Percent Solid	78		%	09/09/05	O/E	E160.3
MADEP MCP EPH Certification	Completed			09/12/05	ЪH	MCP
MADEP MCP VPH Certification	Completed			09/13/05	AS	MCP
EPH Extraction	Completed			09/08/05	O/D/T	3545
Ext. Petroleum Hydrocarbons	Completed	330	ug/Kg	09/12/05	JH	MAEPH9
MA Petroleum Hydrocarbon (VPH)	Completed	5.0	ug/Kg	09/12/05	RM	<b>VPH98-1</b>

**Comments:** 

ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director

### MADEP MCP Response Action Analytical Report Certification Form

Project #:

Laboratory Name: Phoenix Environmental Laboratories, Inc.

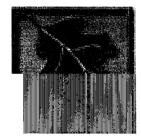
This F	ct Location: orm provides co 329, AG67630,	ertificat	tions for the fol	llowing data set: [list Lat		DEP RTN1:  D Number(s)]		
Sample	Matrices:	Gr	oundwater	Soil/Sediment	Drinking Water	Other:		
M	CP SW-846		☐ 8260B		<b>8330</b>	6010B	7470A/1A	
Me	thods Used		☐ 8270C	☐ 8081A	✓ VPH	6020	9014M2	
	cified in MADE	>	8082	☐ 8021B	<b>□</b> EPH	7000S3	7196A	
Analyti	cal Methods. all that apply)	2	M - SW-846 N	racking Number (RTN), lethod 9014 or MADEP f lethods 7000 Series List	Physiologically Av		AC) Metho	
	An affirmati	ve re	sponse to q	uestions A, B, and C	is required fo	r "Presumptive	Certainty" status	
Α				y the laboratory in a of-Custody docume			⊡Yes □ No	
В	included in	this re	eport followe ative QC da	required for the speed, including the request tathat did not meet	uirement to no	te and	Refer to attached MCP Certification (s).	
С	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?							
D				: Was the VPH or I			Refer to attached MCP Certification (s).	
	A resp	onse	to question	s E and F below is r	equired for "Pi	resumptive Cert	ainty" status	
E	Were all Queen methods as			tandards and recom	mendations fo	r the specified	Refer to attached MCP Certification (s).	
F	F Were results for all analyte-list compounds/elements for the specified method(s) reported?							
	All ne	gative	responses mu	ıst be addressed in an a	ttached Environm	ental Laboratory ca	se narrative.	
inqu	iry of those	resp	onsible for		rmation, the I	material contai	upon my personal ined in this analytical	
1	norized nature:		Zh Sh	ll-	Date:	Tuesday, Sept	ember 13, 2005	
Prin	ted Name:	Phylli	S Shiller		Position:	Laboratory Dir	ector	
Prin	ted Name:	Kathl	een Cressia	1	Position:	QA/QC Officer		

April 2004

CAM VII A, rev. 3.2

# Draft Pathogen TMDL for the Boston Harbor Watershed (excluding the Neponset River sub-basin)





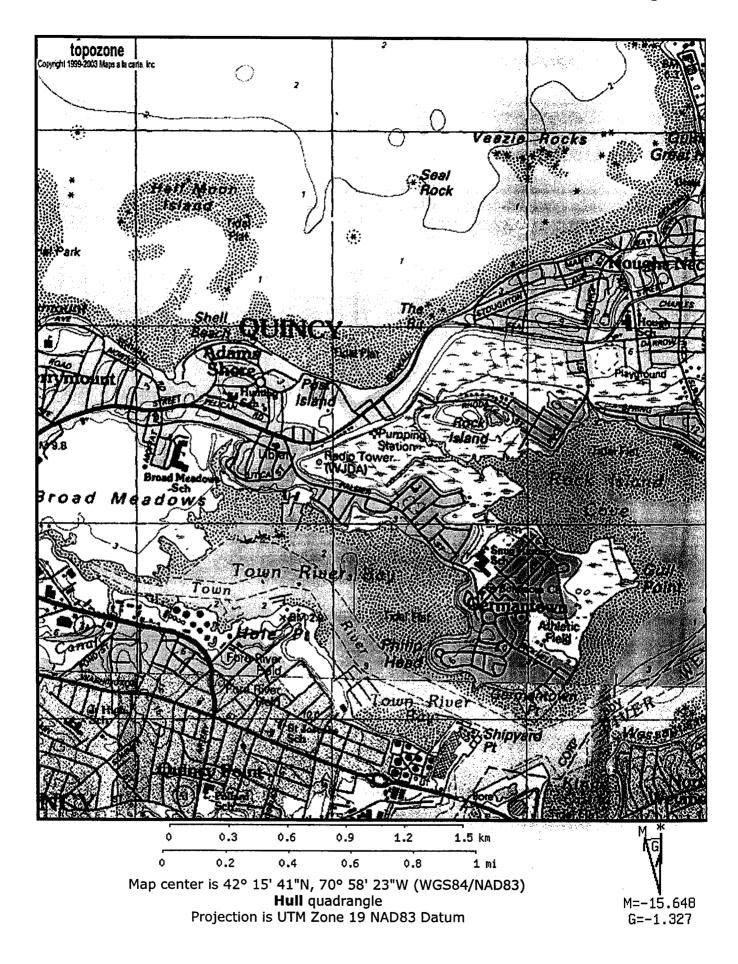


#### Prepared as a cooperative effort by:

Massachusetts DEP 1 Winter Street Boston, Massachusetts 02108 USEPA New England Region 1 1 Congress Street, Suite 1100 Boston, Massachusetts 02114



ENSR International 2 Technology Park Drive Westford, MA 01886





## U.S. Environmental Protection Agency Total Maximum Daily Loads

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#### **Listed Water Information**

**CYCLE: 2002** 

Click here to see metadata for this report.

Cycle:

2002 State: MA List ID: MA74-14

Waterbody Name:

WEYMOUTH FORE RIVER

State Basin Name: BOSTON HARBOR: WEYMOUTH & WEIR

**Listed Water Map Link:** 

MAP 303(d)

#### Comments:

ROUTE 53, BRAINTREE TO MOUTH (EASTERN POINT AT LOWER NECK, WEYMOUTH AND WESTERN POINT AT WALL STREET ON HOUGHS NECK, QUINCY).

#### State List IDs:

Cycle	State List ID
2002	MA74-14_2002

#### State Impairments:

State Impairment	Parent Impairment	Priority F	Rank Ta	rgeted Flag	Anticipated TMDL Submittal
PATHOGENS					

### Potential Sources of Impairment:

There were no potential sources reported to EPA by the state.

## **Total Maximum Daily Load (TMDL) Information:**

There were no TMDLs reported to EPA by the state.

#### **Watershed Information:**

Watershed Name	Watershed States
CHARLES	MASSACHUSETTS

Water | Wetlands, Oceans & Watersheds | Watershed Protection

### **Veymouth Fore River Segment MA74-14**

his 3.3 square mile Class SB, Shellfishing Restricted segment extends from Route 53 in raintree to the river's mouth. The eastern point of the mouth is located at Lower Neck Weymouth, and the western point of the mouth is located at Wall Street on Houghs eck in Quincy. There are no regulated water withdrawals listed in the MADEP WQA or this segment. The following have NPDES permits to discharge to the Weymouth ore River:

- 1. Twin Rivers Technologies, L.P. is permitted to discharge non-contact cooling water and storm water via one outfall to this segment;
- 2. the Fore River Station, a natural gas fired combined cycle power plant owned by Sithe Edgar Development, LLC, is permitted to discharge storm water; and
- 3. MWRA is permitted to discharge wastewater from construction site run-off and tunnel dewatering discharge generated during tunnel digging for the Nut Island Inter Island Tunnel.

Il communities in this segment's drainage area (excluding Boston) are required to apply r Phase II NPDES storm water general permits for their MS4.

MF Designated Shellfish Growing Areas Status as of July 1, 2000: Conditionally estricted for 0.63 square miles; Management Closure for 0.11 square miles; Prohibited r 2.56 square miles (Figure 2-1).

s part of their receiving water monitoring program, the MWRA collected fecal coliform mples at site 116 Hingham Bay, mouth of Fore River, red Nun #28 between 1996 and 100 (MADEP 2002a). Data from their sampling are summarized in Table 4-20 below.

able 4-20. MA74-14 Weymouth Fore River Fecal Coliform Data Summary.

				Primary Contact Season			
	Min	Max		Min	Max		# Samples >400
Site Description	cfu/100mL		n	cfu/100mL		l n	cfu/100mL
MWRA 1996-2000							
Mouth of Fore River	<5	8,400	116	<5	2,560	69	5 (7%)

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: Eastern Avenue Reconstruction Project

Operator signature:

Title: Project Manager

Date: 10/10/05